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Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 1. Statewide Order No. 29-B

Chapter 1. General Provisions

§101. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

Agent—the director of the Division of Minerals, the chief engineer thereof, or any of the district managers or their aides.

Department—the Department of Conservation of the state of Louisiana.

District Manager—the head of any one of the districts of the state under the Division of Minerals, and as used, refers specifically to the manager within whose district the well or wells are located.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§103. Application to Drill

A. All applications for permits to drill wells for oil or gas or core test wells below the fresh water sands shall be made on Form MD-10-R or revisions thereof, and mailed or delivered to the district office. These applications, in duplicate, shall be accompanied by three copies of the location plat, preferably drawn to a scale of 500 feet to the inch. The plats shall be constructed from data compiled by a registered civil engineer or surveyor and shall definitely show the amount and location of the acreage with reference to quarter-section corners, or other established survey points. There shall also be shown all pertinent lease and property lines, leases and offset wells. When the tract to be drilled is composed of separately-owned interests which have been pooled or unitized, the boundaries to and the acreage in each separately-owned interest must be indicated. Plats must have well locations certifications either written on or attached to the well location plats and this certification must be signed by a registered civil engineer, qualified surveyor or a qualified engineer regularly employed by the applicant. If possible the application card shall give the name and address of the drilling contractor, otherwise the information, as soon as determined, shall be supplied by letter to the district manager.

B. When dual completion applications are granted, each well shall be considered as two wells. The production from each sand shall be run through separate lead lines and the production from each sand shall be measurable separately.

The department's agent shall designate suitable suffixes to the well number which will serve as reference to each producing sand.

- C. No well shall be drilled, nor shall the drilling of a well be commenced, before a permit for such well has been issued by the Department of Conservation; furthermore, any work, such as digging pits, erecting buildings, derricks, etc., which the operator may do or have done, will be done at his own risk and with the full understanding that the Department of Conservation may find it necessary to change the location or deny the permit because of the rules and regulations applying in that instance.
- D. No well shall commence drilling below the surface casing until a sign has been posted on the derrick, and subsequently on the well if it is a producer, showing the ownership and designation of the well, name of lease, section, township, range, and the serial number under which the permit was issued. The obligation to maintain a legible sign remains until abandonment.
- E. In order to make the designation of the well, as referred to above, more uniform throughout the state, and thus to facilitate the handling of all matters relative to any particular well, the following system of rules has been developed for use in the naming of wells in the future in Louisiana.
- 1. In no case shall any operator name or well name exceed 30 characters. A space is equivalent to one character.
- a. Abbreviations shall be used whenever possible to comply with the above. It is recommended that "S" be used for sand and "U" for unit.
- b. The official well name appearing on Form MD-10-R (Application to Drill) shall be used when reporting on all Department of Conservation forms and also in any correspondence.
- 2. Lease Wells. All wells drilled on a lease basis shall bear the lessor's surname and initials or given name.

Example: Lease Name Well Number

J. R. Smith Number 2

- 3. The commissioner shall prescribe or cause to have prescribed the procedure for assigning well and/or nomenclature and shall issue a memorandum concerning same from time to time as the need arises.
- a. Developmental units proposed at a hearing shall be named in accordance with the latest memorandum, and the well number shall depend on whether or not there are any other wells in existence on the lease.

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- b. Any unit maps filed with an application for hearing must reflect proposed unit names in accordance with the latest memorandum.
- 4. Units with Alternate Unit Wells. For those cases where more than one well serves the same proration unit, the wells shall be named in accordance with the latest memorandum, and the well number shall be followed by the letters ALT in the case of each alternate well.

Example: Lease Name Well Number

Hayes Sue; J. R. Smith Number 1

Hayes Sue; Dave Luke Number 1 ALT

Hayes Sue; St. Mary Number 22 ALT

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (August 1958), (August 1961), (May 1973).

§104. Financial Security

A. Unless otherwise provided by the statutes, rules and regulations of the Office of Conservation, financial security shall be required by the operator of record (operator) pursuant to this Section for each applicable well as further set forth herein in order to ensure that such well is plugged and abandoned and associated site restoration is accomplished. A compliance order and/or civil penalty which has been timely satisfied shall not cause an operator to be considered a non-compliant operator for the purpose of this Section.

1. Permit to Drill

- a. On or after July 1, 2000, the applicant for a permit to drill must provide financial security for such well in accordance with the following.
- i. An operator who has exhibited a record of compliance with the statutes, rules, and regulations of the Office of Conservation for a period of 48 months immediately preceding the permit date of the well and who has no outstanding violations shall be exempt from providing financial security under this Section.
- ii. An operator who has not been a registered operator of record for a period of 48 months immediately preceding the permit date of the well in question shall comply with the following.
- (a). An operator who has not previously been an operator of a well (drilling, drilled or completed) shall provide financial security in a form acceptable to the commissioner prior to issuance of a permit to drill.
- (b). An operator who has previously been an operator of a well (drilling, drilled or completed) for less than the prescribed 48 months but has otherwise exhibited a record of compliance with the statutes, rules and regulations of the Office of Conservation and who has no outstanding violations shall provide financial security in a form acceptable to the commissioner within 30 days of completion date as reported on Form Comp or Form WH-1.

iii. An operator who has not exhibited a record of compliance with the statutes, rules, and regulations of the Office of Conservation for a period of 48 months immediately preceding the permit date of the well shall provide financial security in a form acceptable to the commissioner prior to issuance of permit to drill.

2. Amended Permit to Drill/Change of Operator

- a. Any application to amend a permit to drill for change of operator must be accompanied by financial security in accordance with the following.
- i. An operator who has previously been an operator of a well for a period of at least 48 months immediately preceding the amended permit to drill date, who has exhibited a record of compliance with the statutes, rules and regulations of the Office of Conservation and who has no outstanding violations shall be exempt from providing financial security under this Section.
- ii. Any operator who does not meet the criteria specified in §104.A.2.a.i above shall provide financial security in a form acceptable to the commissioner prior to issuance of an amended permit to drill.
- 3. Financial security in a form acceptable to the commissioner shall be provided prior to issuance of a permit to drill or amended permit to drill to any operator which includes a primary officer therein who is or was a primary officer of an operator assigned an orphan status.
- 4. The financial security requirements provided herein shall apply to Class V wells as defined in LAC 43:XVII.103 for which an application for a permit to drill or amended permit to drill is submitted on and after July 1, 2000, at the discretion of the commissioner.
- B. Compliance with this financial security requirement shall be provided by any of the following or a combination thereof:
- 1. certificate of deposit issued in sole favor of the Office of Conservation in a form prescribed by the commissioner from a financial institution acceptable to the commissioner. A certificate of deposit may not be withdrawn, canceled, rolled over or amended in any manner without the approval of the commissioner; or
- 2. a performance bond in sole favor of the Office of Conservation in a form prescribed by the commissioner issued by an appropriate institution authorized to do business in the state of Louisiana; or
- 3. letter of credit in sole favor of the Office of Conservation in a form prescribed by the commissioner issued by a financial institution acceptable to the commissioner.

C. Financial Security Amount

1. Land Location

a. Individual well financial security shall be provided in accordance with the following.

Measured Depth	Amount
<u><</u> 3000'	\$1 per foot
3001-10000'	\$2 per foot
≥ 10001'	\$3 per foot

b. Blanket financial security shall be provided in accordance with the following.

Total Number of Wells Per Operator	Amount
≤ 10	\$ 25,000
11-99	\$125,000
≥ 100	\$250,000

- 2. Water Location—Inland Lakes and Bays—any water location in the coastal zone area as defined in R.S. 49:214.27 except in a field designated as offshore by the commissioner.
- a. Individual well financial security shall be provided in the amount of \$8 per foot of well depth.
- b. Blanket financial security shall be provided in accordance with the following.

Total Number of Wells Per Operator	Amount
≤ 10	\$ 125,000
11-99	\$ 625,000
≥ 100	\$1,250,000

- 3. *Water Location—Offshore*—any water location in a field designated as offshore by the commissioner.
- a. Individual well financial security shall be provided in the amount of \$12 per foot of well depth.
- b. Blanket financial security shall be provided in accordance with the following.

Total Number of Wells Per Operator	Amount
≤ 10	\$ 250,000
11-99	\$1,250,000
≥ 100	\$2,500,000

- 4. An operator of land location wells and water location wells who elects to provide blanket financial security shall be subject to an amount determined by the water location requirements.
- 5. The amount of the financial security as specified above may be increased at the discretion of the commissioner.
- D. A change of name by a compliant operator of record through acquisition, merger, or otherwise does not preclude said successor operator from meeting the requirements for exemption from financial security under this Section.
- E. The commissioner retains the right to utilize the financial security provided for a well in responding to an emergency applicable to said well in accordance with R.S. 30:6.1.
- F. Financial security shall remain in effect until release thereof is granted by the commissioner pursuant to written request by the operator. Such release shall only be granted after plugging and abandonment and associated site restoration is completed and inspection thereof indicates compliance with applicable regulations or upon transfer of

such well to an exempt operator. In the event provider of financial security becomes insolvent, operator shall provide substitute form of financial security within 30 days of notification thereof.

- G. Plugging and abandonment of a well, associated site restoration, and release of financial security constitutes a rebuttable presumption of proper closure but does not relieve the operator from further claim by the commissioner should it be determined that further remedial action is required.
- H. In the event that an operator has previously provided financial security pursuant to LAC 43:XIX.104, such operator shall provide increased financial security, if required to remain in compliance with this Section, within 30 days after notice from the commissioner.

AUTHORITY NOTE: Promulgated in accordance with R. S. 30.4, et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation LR 26:1306 (June 2000), amended LR 27:1917 (November 2001).

§105. All Other Applications

- A. All applications for permits to repair (except ordinary maintenance operations), abandon (plug and abandon), acidize, deepen, perforate, perforate and squeeze, plug (plug back), plug and perforate, plug back and side-track, plug and squeeze, pull casing, side-track, squeeze, squeeze and perforate, workover, cement casing or liner as workover feature, or when a well is to be killed or directionally drilled, shall be made to the district office on Form MD-11-R and a proper permit shall be received from the district manager before work is started. A description of the work done under the above recited work permits shall be furnished on the reverse side of the Well History and Work Resume Report (Form WH), which form shall be filed with the district office of the Department of Conservation in which the well is located within 20 days after the completion or recompletion of the well. At least 12 hours prior notice of the proposed operations shall be given the district manager and/or an offset operator in order that one of them may witness the work. If the district manager fails to appear within 12 hours, the work may be witnessed by the offset operator, but failing in this, the work need not be held up longer than 12 hours. This rule shall not deter an operator from taking immediate action in an emergency to prevent damage.
- B. When a service company, other than the drilling contractor, cements, perforates or acidizes, either before or after completion of a well, the service company shall furnish the district manager with legible exact copies of reports furnished the owner of the well.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (August 1958).

§107. Records

A. The district office shall be supplied with available field maps showing lease lines and well locations for all producing areas within the district, such maps to be provided by persons or companies operating in the field, on request of the commissioner or his agent.

- B. Electrical logs, when run, of all test wells, or wells drilled in search of oil, gas, sulphur and other minerals, shall be mailed in duplicate to the district office of the Department of Conservation in which the well is located, such copies to be mailed within 10 days after completion of the well. These logs shall be filed on the following scales:
 - all north Louisiana districts:
 normal log—2 inches to 100 feet;
 - 2. all south Louisiana districts:

normal log—1 inch to 100 feet;

detailed log-5 inches to 100 feet.

- C. The service company running the electric log on the well shall include as a part of the information on the log the permit serial number of the well.
- D. A new form entitled "Well History and Work Résumé Report" (Form WH) shall be filed with the district office in which the well is located within 20 days after completion of the well. This report shall be filed on forms furnished by the Department of Conservation or on like forms as reproduced by the operator.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (August 1958).

§109. Casing Program

A. Conductor Pipe. Conductor pipe is that pipe ordinarily used for the purpose of supporting unconsolidated surface deposits. The use and removal of conductor pipe during the drilling of any oil and gas well shall be at the option of the operator.

B. Surface Casing

1. Where no danger of pollution of fresh water sources exists, the minimum amount of surface of first-intermediate casing to be set shall be determined from Table 1 hereof.

	Table 1			
Total Depth of Contact	Casing Required	Number of Sacks Cement	Surface Casing Test Pressure (lbs. per sq. in.)	
0-2500	100	200 or circulate to surf*	300	
2500-3000	150	500 "	600	
3000-4000	300	500 "	600	
4000-5000	400	500 "	600	
5000-6000	500	500 "	750	
6000-7000	800	500 "	1000	
7000-8000	1000	500 "	1000	
8000-9000	1400	500 "	1000	
9000-Deeper	1800	500 "	1000	

^{*}Circulate to the Surface shall mean the calculated amount of cement necessary to fill the theoretical annular space plus 10 percent.

a. In known low-pressure areas, exceptions to the above may be granted by the commissioner or his agent. If, however, in the opinion of the commissioner, or his agent,

the above regulations shall be found inadequate, and additional or lesser amount of surface casing and/or cement or test pressure shall be required for the purpose of safety and the protection of fresh water sands.

- 2. Surface casing shall be tested before drilling the plug by applying a minimum pump pressure as set forth in Table 1 after at least 200 feet of the mud-laden fluid has been displaced with water at the top of the column. If at the end of 30 minutes the pressure gauge shows a drop of 10 percent of test pressure as outlined in Table 1, the operator shall be required to take such corrective measures as will insure that such surface casing will hold said pressure for 30 minutes without a drop of more than 10 percent of the test pressure. The provisions of Paragraph D.7, below, for the producing casing, shall also apply to the surface casing.
- 3. Cement shall be allowed to stand a minimum of 12 hours under pressure before initiating test or drilling plug. Under pressure is complied with if one float valve is used or if pressure is held otherwise.

C. Intermediate Casing

- 1. Intermediate casing is that casing used as protection against caving of heaving formations or when other means are not adequate for the purpose of segregating upper oil, gas or water-bearing strata.
- 2. If an intermediate casing string is deemed necessary by the district manager for the prevention of underground waste, such regulations pertaining to a minimum setting depth, quality of casing, and cementing and testing of sand, shall be determined by the department after due hearing. The provisions of Paragraph D.7 below, for the producing casing, shall also apply to the intermediate casing.

D. Producing Oil String

- 1. Producing or oil string is that casing used for the purpose of segregating the horizon from which production is obtained and affording a means of communication between such horizons and the surface.
- 2. The producing string of casing shall consist of new or reconditioned casing, tested at mill test pressure or as otherwise designated by the department and set at a sufficient depth to cut off all gas formations above the oil-saturated horizon in which the well is to be completed. The position of the oil horizon shall be determined by coring, testing or electrical logging, or other satisfactory method, and the producing string of casing shall be bottomed and cemented at a point below the gas/oil contact if determinable and practicable.
- 3. Cement shall be by the pump-and-plug method, or another method approved by the department. Sufficient cement shall be used to fill the calculated annular space behind the casing to such a point, as in the opinion of the district manager, local conditions require to protect the producing formations and all other oil and gas formations occurring above, but in every case, no less cement shall be used than the calculated amount necessary to fill the annular space to a point 500 feet above the shoe.

- 4. The amount of cement to be left remaining in the casing, until the requirements of Paragraph 5 below have been met, shall be not less than 20 feet. This shall be accomplished through the use of a float-collar, or other approved or practicable means, unless a full-hole cementer, or its equivalent, is used.
- 5. Cement shall be allowed to stand a minimum of 12 hours under pressure and a minimum total of 24 hours before initiating test or drill plug in the producing or oil string. Under pressure is complied with if one or more float valves are employed and are shown to be holding the cement in place, or when other means of holding pressure is used. When an operator elects to perforate and squeeze or to cement around the shoe, he may proceed with such work after 12 hours have elapsed after placing the first cement.
- 6. Before drilling the plug in the producing string of casing, the casing shall be tested by pump pressure, as determined from Table 2 hereof, after 200 feet of mud-laden fluid in the casing has been displaced by water at the top of the column.

Table 2. Intermediate and Producing Casing			
String Pressure	No. of Sacks of	Producing Test	
Depth Set	Cement	(lbs. per sq. in.)	
2000-3000'	200*	800	
3000-6000'	300*	1000	
6000-9000'	500*	1200	
9000-and deeper	500*	1500	

*But in every case no less cement shall be used than the calculated amount necessary to fill the annular space to a point 500 feet above the shoe.

- a. If at the end of 30 minutes the pressure gauge shows a drop of 10 percent of the test pressure or more, the operator shall be required to take such corrective measures as will insure that the producing string of casing is so set and cemented that it will hold said pressure for 30 minutes without a drop of more than 10 percent of the test pressure on the gauge.
- 7. If the commissioner's agent is not present at the time designated by the operator for inspection of the casing tests of the producing string, the operator shall have such tests witnessed, preferably by an offset operator. An affidavit of test, on the form prescribed by the Department of Conservation, signed by the operator and witness, shall be furnished to the district office of the Department of Conservation showing that the test conformed satisfactorily to the above mentioned regulations before proceeding with the completion. If test is satisfactory, normal operations may be resumed immediately.
- 8. If the test is unsatisfactory, the operator shall not proceed with the completion of the well until a satisfactory test has been obtained.

E. Tubing and Completion

1. A valve, or its equivalent, tested to a pressure of not less than the calculated bottomhole pressure of the well, shall be installed below any and all tubing outlet connections.

- 2. When a well develops a casing pressure, upon completion, equivalent to more than three-quarters of the internal pressure that will develop the minimum yield point of the casing, such well shall be required by the district manager to be killed, and a tubing packer to be set so as to keep such excessive pressure of the casing.
- F. Wellhead Connections. Wellhead connections shall be tested prior to installation at a pressure indicated by the district manager in conformance with conditions existing in areas in which they are used. Whenever such tests are made in the field, they shall be witnessed by an agent of the department. Tubing and tubingheads shall be free from obstructions in wells used for bottomhole pressure test purposes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Conservation (August 1943), amended (February 1951), (August 1958), amended by the Department of Natural Resources, Office of Conservation, LR 25:1523 (August 1999).

§111. Blowout Preventers

A. All wells drilling or running casing or tubing are to be equipped with a master gate and a blowout preventer having the correct size rams or plugs installed and in first class condition, together with a flowing valve of the recommended size and working pressure. If a fill-up line is connected to the blowout preventer, the line shall be equipped with such valves and fittings of at least the same working pressure as the blowout preventer. If the preventer is hydraulically operated, adequate pressure shall at all times be available for efficient operations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§113. Casing-Heads

A. All wells shall be equipped with casing-heads with a test pressure in conformance with conditions existing in areas in which they are used. Casing-head body, as soon as installed shall be equipped with proper connections and valves accessible to the surface. Reconditioning shall be required on any well showing pressure on the casing-head, or leaking gas or oil between the oil string and next larger size casing string, when, in the opinion of the district managers, such pressure or leakage assume hazardous proportions or indicate the existence of underground waste. Mud-laden fluid may be pumped between any two strings of casing at the top of the hole, but no cement shall be used except by special permission of the commissioner or his agent

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§115. Fire Hazards

A.l. All wells shall be cleaned into a pit, barge, or tank, located at a distance of at least 100 feet from any fire hazard.

- 2. Before any well shall be perforated, the drilling fluid in the well shall be conditioned and brought to a weight necessary to hold the normal hydrostatic pressure at the point to be perforated with a reasonable margin of safety; provided, however, in cases where the tubing and Christmas tree are set for production, the weight of the drilling fluid may be reduced below that weight necessary to hold the normal hydrostatic pressure at the point to be perforated. Before perforating, proper connections for lubricating the gun in and out of the hole shall be installed.
- 3.a. All drill stem tests shall be started and completed during daylight hours, except in fields where from bottomhole pressures and other information it is known that the pressure does not exceed the pressure of a column of oil from top to hole to the producing horizon. *Started and Completed* shall mean the opening and the closing of the drill-stem testing tool valve or valves controlling the flow through the choke.
- b. In the absence of special prior permission from the department, no drill-stem test shall be conducted with chokes larger than 1/4 inch on both top and bottom.
- 4. All wells shall be swabbed or bailed during the daylight hours except in cases of low pressure wells as Paragraph 3 above.
- B. No boiler, open fire, or electric generator shall be operated within 100 feet of any producing oil or gas well, or oil tank.
- C.1. Each permanent oil tank or battery of tanks that are located within the corporate limits of any city, town or village, or where such tanks are closer than 500 feet to any highway or inhabited dwelling or closer than 1000 feet to any school or church, or where such tanks are so located as to be deemed a hazard by the Commissioner of Conservation, must be surrounded by a dike (or firewall) or retaining wall of at least the capacity of such tank or battery of tanks, with the exception of such areas where such dikes (or firewalls) or retaining walls would be impossible such as in water areas. At the discretion of the Commissioner of Conservation, firewalls of 100 percent capacity can be required where other conditions or circumstances warrant their construction.
- 2. In water, swamp or marsh areas, where the building of firewalls is impossible or impracticable, in the future, permanent tanks shall be placed on an impervious platform surrounded by a metal gutter to catch all the oil and other wastes which may cause either a fire-hazard or pollution. A sump shall be provided to catch the run-off from the gutters; however, if the operator or company has devised a plan which serves the same purpose, the district manager may after being presented with the plan, waive the above requirements.
- 3. Tanks not falling in the above categories (Paragraphs 1 and 2) must be surrounded by a retaining wall, or must be suitably ditched to a collecting sump, each of sufficient capacity to contain the spillage and prevent pollution of the surrounding areas.

- D. All gas vents from oil tanks shall terminate outside of the firewall.
- E. Any rubbish or debris that might constitute a fire hazard shall be removed to a distance of at least 100 feet from the vicinity of wells, tanks, and pump stations. All waste shall be burned or disposed of in such a manner as to avoid creating a fire hazard or polluting streams and fresh water strata.
- F. Each operator shall so conduct his operations and maintain his equipment as to reduce to a minimum the danger of explosion or fire, and consequent waste.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (March 1955), (December 1963).

§117. Drilling Fluids

A. The inspectors and engineers of the Department of Conservation shall have access to the mud records of any drilling well, except those records which pertain to special muds and special work with respect to patentable rights, and shall be allowed to conduct any essential test or tests on the mud used in the drilling of a well. When the conditions and tests indicate a need for a change in the mud or drilling fluid program in order to insure proper control of the well, the district manager shall require the operator or company to use due diligence in correcting any objectionable conditions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§119. Well Allowables and Completion

- A. New Well and Recompleted Well Allowables
- 1. Upon completion or recompletion of a well, immediate notice within 24 hours from the time of completion (Sundays and holidays excepted) must be filed in writing with the district office on forms provided by the department. Notice of completion or recompletion of a well may be made by telephone or telegram to the district manager if supplemented by written notice on proper form within three days from the date of completion or recompletion. Wells shall be considered completed when turned into the tanks. A potential and gas/oil ratio test shall then be conducted by the operator or company, and witnessed by an inspector of the department within five days from the date of completion or recompletion (Sundays and holidays excepted).
- 2. After receipt of the completion reports and reports or tests required by the commissioner, a completed or recompleted well shall be given a daily allowable, determined in the same manner as was used in computing the schedule of daily allowables for the months in which such completion is made.
- 3. The daily well allowable when determined shall be effective from 7 a.m. on the date of completion or recompletion if the well is completed or recompleted before 7 p.m.; and from 7 a.m. of the following day if the well is

completed or recompleted after 7 p.m.; provided the completion or recompletion report has been filed in accordance with the above-mentioned provisions, and if the initial potential and gas/oil ratio test has been made within five days from the date of completion or recompletion.

- a. If the completion or recompletion is not reported as provided, then the daily well allowable shall be effective from the date of receipt of the completion or recompletion report, with a one-day tolerance. If the initial potential and gas/oil ratio test is not made within five days from the date of completion or recompletion, the daily well allowable shall be effective as of the date of request by the operator for an inspector of the department to witness the said test.
- B. Allowables given to wells for oil produced on drillstem tests, production test and any miscellaneous production of oil shall be in accordance with the following rule:
- 1. All operators are required, within five days, to file three signed copies of the records of the daily production from the well, showing the number of hours the well produced and the interval of production; as "from 8 a.m., August 5 to 3 p.m., August 8, 1941."
- C. All leases are to be so equipped as to permit the determination of gas/oil ratios on individual flowing and gas-lift wells. Gas/oil ratio data on all wells shall be available to the inspector of the department at all times.
- D. No flowing and/or gas-lift oil wells shall be permitted to produce with excessive gas/oil ratio, except where special orders are operative. Wells that are gas/lifted with gas from gas wells shall be prorated in the same manner as are hi-ratio naturally flowing oil wells, the G.O.R. being defined for this purpose as the total output gas less the total input gas divided by the number of barrels of oil produced. The uneconomic or unreasonable use of gas for gas-lift will not be permitted.
- E.l. Each lease shall be provided with sufficient tankage or meters to permit proper gauging of the oil produced. The tanks or meters must be identified by a sign showing the ownership of the tanks or meters and name of the lease from which the oil is being produced. In no case shall meters be the sole means of measuring oil runs from any field. There must be used at least one gauge tank to check the reading of meters. Applications for the use of oil meters in lieu of gauge tanks, shall be the subject of open hearings until rules are formulated.
- 2. All flowing and gas-lift oil wells are to be produced through efficient operating separators, except in the case of low-pressure headings of gas-lift wells with low-gas output.
- 3. All oil meters and bypass settings shall be provided with the necessary connections to permit the installation of seals and such seals shall be affixed by the operator. A record shall be kept on file and available for inspection by any agent of the department or any party at interest for a period of not less than three years, which reflects the oil meter seal number, the date and time the oil meter is sealed, the date and time the seal is broken and the reason for breaking the seal. To obviate the necessity of affixing oil meter seals, oil meters with nonresettable counters may be used.

- 4. When it becomes necessary to use a bypass or other flowline connection which the operator has been required to seal or which has been sealed by the department, permission to use same must be obtained from the district manager. In the event that an unforeseen emergency requires the use of bypass or flowline connections before notification to the district office, a detailed, written report, in duplicate, setting forth the occasion for such action must be given, and the bypass or other connection shall forthwith be resealed.
- F. In the event that any operator considers that his well has not had a fair determination of its gas/oil ratio, or that its gas/oil ratio has changed due to natural causes or to corrective work on his well, he may make application in writing to the district manager for a retest or a special test of the gas/oil ratio of his well, and for an adjustment of the allowable of his well. If, upon retesting a well, the district manager finds that the new gas/oil ratio justifies a change in the allowable, he is authorized to make such change.
- G. Changed or corrected allowable shall be effective from the date of completion of such work, but in no case shall the effective date be before the date of request by the operator to the district manager for a retest or a special test.
- H. Gas wells shall not be tested by the open-flow method. The back-pressure method of determining the open flow, as outlines by the Bureau of Mines in their Monograph 7, "Back Pressure Data on Natural Gas Wells", shall be used. When, for any reasons, the back-pressure method is not feasible, an acceptable method, not entailing excessive physical waste of gas, may be used, upon recommendation of the technical staff of the department.
- I. It is recognized that wells capable of producing their daily oil allowable may underproduce one day and overproduce another day during the period of an allowable schedule; however, such deficiencies as occur in this manner may be made up by excess production from the same well on the succeeding days during the period of that schedule, or such overproduction may be adjusted by underproduction on the succeeding days during the period of that schedule; provided, however, that no well shall produce in any one calendar month more than the total daily allowable per well multiplied by the total number of days in the calendar month; however, in order to provide working stocks of oil and to facilitate the production and gathering of oil including testing, bottomhole pressure survey, et cetera, the production and possession of a quantity of oil in the lease storage not exceeding three days current allowable production for the lease at the end of the month in excess of the total monthly allowables, as determined in accordance with the provisions of the production and proration order, shall not be construed to be a violation of said order.
- 1. The authorization of production and possession of a quantity of oil not exceeding three days current allowable production shall not be construed to be the granting of authority to any operator to offer to a market, or market, or any transporter to transport any quantity of oil in excess of the quantity specifically determined to be the total monthly allowable for each respective lease whose allowable shall

have been determined by the summation of the monthly quantities determined by the multiplication of the quantity shown in the allowable schedule times the days of the month for which said allowable is effective plus or minus any allowable additions or cancellations multiplied by the days which either or both may be effective during the period covered by the schedule.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (January 1963), (June 1969).

§121. Production, Production Records, Production Tests

- A. All oil tendered to any transportation system shall be gauged and tested for B.S. and W. and temperature. For each and every transfer of oil from the lease tanks, the number of the on-seal and off-seal observed temperature, and the percent of B.S. and W. shall be recorded on each and every run ticket, and each party of any transfer of oil from lease tanks shall receive a copy of the run or delivery ticket or tickets.
- B.1. There shall not be any simultaneous movement of oil into and out of any lease tank that is being used for delivering oil to a gatherer or transporter. Transfer of oil or gas from the possession of one lease to the possession of another lease, except when properly accounted for, is hereby prohibited.
- 2. The possession of improper mechanical means for transferring oil from one lease tank or well to the lease tank or well of another lease is hereby prohibited.
- 3. All pipeline outlets from lease tanks shall be kept sealed at all times except when a pipeline run is being made from the tank, and the number of the on-seal and off-seal shall be recorded on each and every run ticket.
- 4. B.S. and W. bleed-off lines of lease tanks shall be sealed or locked at the time any pipeline run is being made.
- 5. Oil produced from separately-owned leases, not pooled, unitized or consolidated shall not be commingled in lease tanks.
- 6. All leases having more than one producing well shall be equipped with a test line, so as to obviate the necessity of spudding in wells when taking individual well tests.
- C. Producers shall keep the following records in the main office for a period of three years and the current records in the field office for three months:
- 1. the monthly production in gross barrels produced from each lease and tank into which the oil was produced. A record of choke, percent B.S. and W., tubing pressures, and casing pressures of each oil well on that particular lease shall be recorded on a monthly basis, and if a choke is changed, the date of such change shall be recorded on the monthly record. If a well is put on production, either initially or returned to production after cessation of production, during

the monthly period preceding the date of the record, the date the well was put on production shall also be recorded on the monthly record;

- 2. a record of stock on hand on the first day of each month;
- 3. a record of all deliveries of oil from the lease, to whom made, and the identity of the means of transportation, and the transporter; and
- 4. gauge tickets, and run tickets, as made by the employees actually performing or directing the operations recorded on such records.
- D.1. Every producer shall make and report to the district managers production tests of each of his oil wells by the tenth of February, April, June, August, October and December. The data collected shall include the daily rate of production, size choke, percent B.S. and W., tubing pressure, casing pressure, gravity at 60 degrees F, or observed gravity and temperature, gas/oil ratio and volume of gas produced, which shall be recorded on the daily gauge report on or before the above date. A signed record of such tests shall be filed with the district manager.
- 2. When any well or wells shall go off production other than because of ordinary maintenance operations, same shall be reported to the district office immediately and a letter of cancellation of allowable for that well shall be issued

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (January 1963), (July 1959).

§123. Oil and Gas Measurements

- A. Quantities of oil shall be computed from correctly compiled tank tables and no deduction shall be taken therefrom. Corrections shall be made for temperature to the basis of 60 degrees F in accordance with Table 6 in ASTM Designation: D 1250-IP Designation: 200. The full per centum of B.S. and W. as shown by the centrifugal or other tests shall be deducted after making correction for temperature.
- B. Combined Correction Tables for making both temperature and B.S. and W. correction at the same time may be used, if the combined tables are based on the abovementioned Abridged Volume Correction Table for Petroleum Oils, and if the factors are calculated in such a manner that they give the same results as would be obtained by making the temperature correction and the B.S. and W. deduction separately.
- C. A cubic foot of gas is hereby defined as that amount of gaseous hydrocarbons contained in a cubic foot of space at the base temperature of 60 degrees F and an absolute pressure of 14.4 lbs./sq. in. plus 10 oz./sq. inch, which temperature and pressure are referred to as the base temperature and pressure, respectively.
- D. Basic orifice coefficients used in the calculation of gas flow shall be those contained in the American Gas Association's Gas Measurement Committee Report Number

1 and Number 2, or some other basic orifice coefficients generally accepted in the industry and approved by the Department of Conservation, such as those published by the Foxboro Company, American Meter Company, and Pittsburg Equitable Meter Company. Corrections for base pressure, base temperature shall be made. Corrections for supercompressibility are recommended when equal to or greater than one percent in cases where data are available. Corrections for Reynolds number and expansion factor are recommended only in cases where their combined correction is equal to or exceeds 1 percent.

- E. Gas measurements with Pitot tubes shall be based on Reid's formula and shall follow recommendations similar to those set forth in Appendix 4 of the Bureau of Mines Monograph 7. Corrections for base pressure, base temperature, shall be made as in orifice measurements.
- F. Gas measurements with orifice well tests shall follow recommendations similar to those set forth in Bulletin Number E-7 of the American Meter Company. Corrections for base pressure and base temperature, and gravity shall be made as in orifice measurements.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (January 1954), (May 1973).

§125. Delegation of Authority

A. It is the duty of the Commissioner of Conservation, or his agents, to make such changes in the monthly production and proration orders as may appear reasonably necessary for the purposes of safety, conservation, the prevention of waste, or the maintenance of proper gas/oil ratio, in accordance with the orders and regulations of the department.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§127. Bottomhole Pressure

A. The commissioner shall have the authority to require bottom-hole pressure surveys of the various fields at such times as he may designate. However, operators shall be required to take bottom-hole pressures in those wells only which are not likely to suffer any injurious effects therefrom. Tubing and tubingheads shall be free from obstructions in wells used for bottom-hole pressure test purposes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§129. Reserved.

Editor's Note: Statewide Order 29-B was originally codified in LAC 43:XIX as §129. In December 2000, §129 was restructured into Chapters 3, 4 and 5. Chapter 3 contains the oilfield pit regulations. Chapter 4 contains the injection/disposal well regulations. Chapter 5 contains the commercial facility regulations. A cross-reference chart in the December 2000 *Louisiana Register*, p. 2798, indicates the locations for the rules in each existing Section.

§131. Deficient Wells

A. In the event a well does not have the capacity to produce its total allowable then it shall produce such amount of oil and gas less than its allowable that it is able to produce, and the deficiency of such well shall not be made up by the overproduction of any other well.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§133. Monthly Reports

A. The producing, transporting, storing and/or refining of oil shall be reported in accordance with Order No. 25, or as it may be amended, or superseded. The length of time reports and other pertinent data, as defined by Section 16 of Act 157 of the Regular Legislative Session of 1940, shall be kept on file by operators and companies in their offices, and available for inspection by an agent of the Department of Conservation, shall in no case be less than a period of three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§135. Directional Drilling and Well Surveys

- A. Except as otherwise provided in §135, every well drilled in the state of Louisiana shall be drilled in such a manner that at any measured depth the actual or apparent location of the wellbore shall be within a circle whose center is the surface location and whose radius is equal to said measured depth multiplied by the factor 0.087156. The actual or apparent resultant deviation of the wellbore from the vertical shall not be in excess of 5 degrees at any measured depth. In the event a survey indicates that the wellbore is outside the above circle at any measured depth, the wellbore must be straightened and drilling may continue only within the specified limit. A directional survey shall be required and shall be filed with appropriate district manager as confirmation that the wellbore has been straightened and is in fact within the above limit.
- 1. After an operator has commenced drilling a well and desires to change the bottom-hole location by directionally controlling and intentionally deflecting said well from the vertical whether more or less than 5 degrees, unless done to straighten the hole or to sidetrack junk in the hole or because of other mechanical difficulties, he shall first make application for an amended location showing by attached plat the amended projected bottom-hole objective and secure an amended permit to drill before commencing such operations. The amended bottom-hole location or objective shall comply with all minimum distances from lease or property lines as prescribed by all statewide orders or any other applicable field orders.
- 2. In the event a well is to be drilled at a distance from a property line where such distance is less than the apparent resultant lateral deviation, as determined by multiplying the

proposed total depth of the well by the factor 0.087156, a permit to drill for minerals will be issued with the understanding that the operator will be required to furnish the appropriate district manager with inclination and/or directional survey data as proof that the well will be completed in compliance with the provisions of this Statewide Order No. 29-B before an allowable is assigned to said well.

- B. An inclination survey shall be made on all wells drilled in the state of Louisiana with the first shot point at a depth not greater than that of the surface casing seat and succeeding shot points not more than 1,000 feet apart. Inclination surveys conforming to these requirements may be made either during the normal course of drilling or after the well has reached total depth. Such survey data shall be certified by the operator's representative and/or drilling contractor and shall indicate the resultant lateral deviation as the sum of the calculated lateral displacement determined between each inclination survey point assuming that all such displacement occurs in the direction of the nearest property line. If a directional survey determining the bottom of the hole is filed with the Commissioner of Conservation upon completion of the well, it shall not be necessary to furnish the inclination survey data.
- 1. Except as otherwise specified herein, all inclination and/or directional survey data shall be filed along with Form WH (Well History).
- C. A directional survey shall be run and three certified copies thereof filed by or at the direction of the operator with the appropriate district manager of the Department of Conservation on all future wells drilled in the state of Louisiana where:
- 1. the well is directionally controlled and is thereby intentionally deflected from the vertical; or
- 2. the surface location is less than 330 feet from the nearest property line, and the well is drilled below a depth of 3,786 feet; or
- 3. the resultant lateral deviation as calculated from inclination survey data is a distance greater than the distance from the center of the surface location of the wellbore to the nearest property line; or
- 4. the wellbore deviates laterally a resultant distance greater than that determined by a 5-degree angle from a vertical line passing through the center of the surface location of the wellbore.

Property Line, as used herein, shall mean the boundary dividing tracts on which mineral rights, royalty rights or leases are separately owned except that where a unit as defined in Section 9, Paragraph B, of Revised Statutes of 1950, has been created, the boundaries of the unit shall be considered the property line.

D. The Commissioner of Conservation, on his own initiative or at the request of an offset operator, shall have the right to require the operator to run a directional survey on any well if there is reasonable cause therefor. Whenever a survey is so required by the commissioner at the request of

an offset operator and the operator of the well and the offset operator are unable to agree as to the terms and conditions for running such survey, the commissioner, upon request of either, shall determine such terms and conditions, after notice to all interested parties and a public hearing.

- E. Unless required by the Commissioner of Conservation under §135.D hereof, a directional survey shall not be required for any well which is not directionally controlled and thereby intentionally deflected from the vertical and which has a surface location, maximum angle of deviation, and total depth, all in compliance with the provisions hereof.
- F. The Commissioner of Conservation may assess appropriate penalties for failure to comply with any of the provisions hereof.
- G. The provisions hereof shall not alter or affect the minimum spacing provisions of Statewide Orders 29-E and 29-H or any other applicable orders.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (March 1967).

§137. Plugging and Abandonment

A. Schedule of Abandonment

1. Dry Holes. All wells drilled for oil or gas and found to be dry prior to or after the effective date of this order shall be plugged within 90 days after operations have been completed thereon or 90 days after the effective date of this order, whichever is later, unless an extension of time is granted by the Commissioner of Conservation.

2. Other Wells on or after Effective Date of Order

- a. All wells wherein production operations or use as a service well have ceased on or after the effective date of this order shall continue to be reported on the Form DM-1-R or Form DT-1 with the appropriate notation that the well is off production or no longer in use as a service well along with the date of last production or date the service well ceased to be used; and, after six months, if such a well has not been restored to production or use as a service well, it shall thereafter be reported by the operator on the semiannual Inactive Well Report, Form INACT WR-1 (1974) which report shall be filed with the Department of Conservation showing the status of such well as of April 1 and October 1 of each year (report to be filed no later than April 25 and October 25). Such wells shall continue to be reported on the Form DM1-R or Form DT-1 showing the date of last production or the date the well ceased to be used as a service well, together with a notation showing the well is carried on the Form INACT WR-1 (1974), Inactive Well Report, until the well is plugged and abandoned.
- b. The Inactive Well Report shall list the field, well name, well number and other pertinent data and provide an appropriate column to classify such well as having either (1) future utility, or (2) no future utility. If the well is classified as having future utility, operator shall specify such utility by completing the appropriate column on the form. Wells so

classified shall be reviewed periodically by the district manager who, at his discretion, may require an operator to supply additional information to justify the classification.

c. All such wells classified on the Inactive Well Report by either the operator or the district manager as having no future utility shall be plugged within 90 days from the date of such classification unless any such well is included in a Schedule of Abandonment approved or promulgated by the Commissioner of Conservation or an extension of time is otherwise granted by the Commissioner of Conservation. The date any Schedule of Abandonment is approved or promulgated or an extension of time expires shall be shown in the appropriate column on the form.

3. Other Wells Prior to Effective Date of Order

- a. All wells wherein production operations or use as a service well have ceased prior to the effective date of this order shall continue to be reported on the Form DM-1-R or Form DT-1 with the appropriate notation that the well is off production or no longer in use as a service well along with the date of last production or date the service well ceased to be used; and, after six months from the effective date of this order is such a well has not been restored to production or use as a service well it shall thereafter be reported, classified and subject to review in the same manner provided for in the preceding Subparagraph b except as hereinafter otherwise provided.
- b. A well classified on the Inactive Well Report by either the operator or the district manager as having no future utility shall not be required to be plugged within a specified period of time but will be plugged in accordance with a Schedule of Abandonment submitted by the operator and approved or otherwise promulgated by the Commissioner of Conservation.
- 4. Schedule of Abandonment. A Schedule of Abandonment submitted in accordance with Subparagraph 2.b or 3.b above shall include a schedule or program for the orderly plugging of wells which should be consistent with prudent operating practices and take into account any economic considerations and other circumstances which would affect such a program of plugging wells. Any Schedule of Abandonment approved or promulgated by the Commissioner of Conservation shall be followed unless modified by the operator with approval of the commissioner. Reference to the approved Schedule of Abandonment shall be made on the Inactive Well Report for each well which is included in such a program and has not yet been plugged.
- 5. Administrative Interpretation. For purposes of administering the heretofore mentioned Paragraphs, it is understood that:
- a. a wellbore which is completed in more than one common source of supply (multiple completions) shall not be considered as ceasing to produce and shall not be reported on the Inactive Well Report as long as there is production from or operations in any completion in the wellbore:

- b. wells classified as having future utility may be off production or shut-in but are considered to have future utility for producing oil or gas for use as a service well;
- c. no completion with a transferred allowable credit will be carried on the Inactive Well Report.
- B. The responsibility of plugging any well over which the Commissioner of Conservation has jurisdiction shall be the owner(s) of record.
- C. In the event any owner(s) responsible for plugging any well fails to do so, and after a diligent effort has been made by the department to have said well plugged, then the commissioner may call a public hearing to show cause why said well was not plugged.
- D. The commissioner or his agent may require the posting of a reasonable bond with good and sufficient surety in order to secure the performance of the work of proper abandonment.
- E. The district manager shall be notified immediately by the new operator whenever a change of operator occurs. This must be accomplished by submitting Department of Conservation Form MD-10-RA (Application for Amended Permit to Drill for Minerals) to reflect the new operator.

F. Plugging Procedures

- 1. Notification of intention to plug any well or wells over which the Commissioner of Conservation has jurisdiction, shall be given to the appropriate district manager prior to the plugging thereof. Notification shall be made in writing to the district office in the form of a WORK PERMIT (Form DM-4 Rev.) for which an original and three copies are required. Where plugging involves a well with a rig on location, the district manager may grant verbal approval to plug and abandon the well provided the work permit is subsequently submitted. Any operator who fails to comply with this requirement may be required by the district manager to place additional cement plug(s) and/or prove the plug(s) are placed as the operator states they are.
- 2. Once an operator has been issued a work permit to plug and abandon a well by the appropriate district manager, then said operator shall be required to contact the appropriate oil and gas inspector a minimum of 12 hours prior to beginning the plugging operations. During drilling and/or workover operations, the requirement to contact the appropriate oil and gas inspector a minimum of 12 hours prior to beginning the plugging operations shall be waived at the time verbal notification is made to the district office.
- 3. In plugging wells, it is essential that all oil or gas bearing formations be protected.
- a. Sufficient cement shall be used to adequately isolate each perforated pool, one from the other. A cement plug of at least 100 feet shall be placed immediately above or across the uppermost perforated interval of the pool. If he deems it advisable, the district manager may allow a bridge plug with a minimum of 10 feet of cement on top to be placed immediately above each producing pool.

- b. In wells completed with screen or perforated liners, if it is impractical for the operator to remove the screen or perforated liner, he shall place a cement plug of at least 100 feet with the bottom as near as practical to the top of the screen or liner. If the district manager deems it advisable, a bridge plug with a minimum of 10 feet of cement on top and placed as near as practical to the top of the screen or liner may be used in lieu of the cement plug.
- c. When production casing is not run or is removed from the well, a cement plug of at least 100 feet shall be placed from at least 50 feet below the shoe of the surface casing to at least 50 feet above. In lieu of the above, the operator shall have the option of using a cement retainer placed at least 50 feet above the surface casing shoe and a sufficient amount of cement shall be squeezed below the retainer to form a cement plug from the base of the retainer to 50 feet below the base of the surface casing. A 10-foot cement plug shall be placed on top of the retainer.
- d. If fresh-water horizons are exposed when production casing is removed from the well, or as a result of production casing not being run, a cement plug shall be placed from at least 100 feet below the base of the deepest fresh-water sand to at least 150 feet above the base of the sand. A cement plug of at least 100 feet shall also be placed from at least 50 feet below the shoe of the surface casing to at least 50 feet above it. In lieu of the above, the operator shall have the option of using a cement retainer placed at least 50 feet above the surface casing shoe and a sufficient amount of cement shall be squeezed below the retainer to form a cement plug from the base of the retainer to 50 feet below the base of the surface casing. A 10-foot cement plug shall be placed on top of the retainer.
- e. The setting and location of the first plug below the top 30-foot plug shall be verified by tagging. In the event a retainer is used, tagging will not be necessary
- f. Additional cement plugs shall be placed to adequately contain any high pressure oil, gas or water sands or as may be required by the district manager.
- g. A 30-foot cement plug minimum shall be placed in the top of the well.
- h. Mud laden fluid of not less than 9 pounds per gallon shall be placed in all portions of the well not filled with cement, unless otherwise approved by the district manager.
- i. All cement plugs shall be placed by the circulation or pump down method unless otherwise authorized by the district manager. The hole must be in a static condition at the time the plugs are placed.
- j. After placing the top plug, the operator shall be required on all land locations to cut the casing a minimum of two feet below plow depth. On all water locations, the casing shall be cut a minimum of 10 feet below the mud line. If an operator contemplates reentering the well at some future date for saltwater disposal or other purpose, the district manager may approve after receiving written request from an operator not to cut off the casing below plow depth or mud line.

- k. The plan of abandonment may be altered if new or unforeseen conditions arise during the well work but only after approval by the district manager.
- 4. Upon plugging any well for any cause, a complete record thereof shall be made out, duly verified and filed in triplicate on Form P&A in the district office within 20 days after the plugging of such well. A cementing report shall be filed with the plugging report.
- G. Well to be Used for Fresh Water. When the well to be plugged may be safely used as a fresh-water well and the owner or owners of the well have, by a mutual written agreement with the landowner, agreed to turn the well over to the landowner for that purpose, then the well need not be filled above the plug set below the fresh-water formation; provided, however, that the signed agreement or (if recorded in the public records) a certified copy thereof be filed with the appropriate district manager, which shall relieve the owner or owners who turn the well over to the landowner from responsibility above the plug. The plugging report shall indicate that the well has been or will be converted to a fresh water well.
- H. Temporary Abandonment of Drilling Wells. Any drilling well which is to be temporarily abandoned and the rig moved away, shall be mudded and cemented as it would be for permanent abandonment, except a cement plug at the surface may be omitted.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943), amended (March 1974).

§139. Exceptions and Hearings

A. If any operator can show to the commissioner that the drilling and producing methods herein prescribed or the particular method by him prescribed for securing tests of wells, or any other part of this Order, as applies to his well or wells, result in waste or as to such operator are unreasonable, the commissioner may enter such an order, as a special exception to the aforesaid rules and regulations, as will prevent such waste or eliminate such unreasonable restraint, as may result from the application of the aforesaid rules and regulations to the well or wells of such operators; provided, however, that before any operator shall be allowed the benefit of an order granting an exception as authorized by this Section, such operator must establish that such exception, if granted, will not result in waste in the field as a whole or give him an inequitable and unfair advantage over another operator or other operators in the field. No special exception will be granted except upon written application, fully stating the alleged facts, which shall be the subject of a hearing to be held not earlier than 10 days after filing of the application. Prior to the hearing upon such application, at least 10 days notice thereof shall be given by publication to all operators in the field. In addition to said notice by publication, adjacent operators where appropriate may be given at least 10 days notice of said hearing by personal service, or by registered mail.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§141. Application of Special Field Orders

A. This order shall be cumulative of, and in addition to, all special orders, rules and regulations affecting the drilling and production of oil and gas, as heretofore promulgated. In case of any conflict between this order and the special orders on specific fields, said special orders on specific fields shall govern.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§143. Penalty for Infractions

A. In accordance with the laws of the state of Louisiana, and especially Act 157 of the Legislature of 1940, any infraction of these rules and regulations may result in shutting in and sealing of any drilling or producing well or wells, tank storage or lease or leases, involved in the infraction, and prohibition of acceptance of oil or gas from such well or lease for purchasing or transporting by agent or, in the alternative, as an additional penalty, be prosecuted under Section 17 of Act 157 of 1940.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

§145. Effective Date

A. This order shall be effective from and after the first day of August, 1943.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (August 1943).

Chapter 3. Pollution Control—Onsite Storage, Treatment and Disposal of Nonhazardous Oilfield Waste (NOW) Generated from the Drilling and Production of Oil and Gas Wells (Oilfield Pit Regulations)

Editor's Note: Statewide Order 29-B was originally codified in LAC 43:XIX as §129. In December 2000, §129 was restructured into Chapters 3, 4 and 5. Chapter 3 contains the oilfield pit regulations. Chapter 4 contains the injection/disposal well regulations. Chapter 5 contains the commercial facility regulations. A cross-reference chart in the December 2000 *Louisiana Register*, page 2798, indicates the locations for the rules in each existing Section.

§301. Definitions

Coastal Area—that area comprising inland tidal waters, lakes bounded by the Gulf of Mexico, and salt water marshes and more particularly identified as the intermediate marshes, brackish marshes, and saline marshes on the

Vegetative Type Map of the Louisiana Coastal Marshes, published by the Louisiana Department of Wildlife and Fisheries, August, 1978.

Community Saltwater Disposal Well or System—as defined in §501.

Contamination—the introduction of substances or contaminants into a groundwater aquifer, a USDW or soil in such quantities as to render them unusable for their intended purposes.

Elevated Wetland Area—a wetland area which is not normally inundated with water and where land mass and levee material are available for mixing with waste fluids during closure of a pit.

Exempt Pits—compressor station pits, natural gas processing plant pits, emergency pits, and salt dome cavern pits located in the coastal area.

Groundwater Aquifer—water in the saturated zone beneath the land surface that contains less than 10,000 mg/l TDS

Hydrocarbon Storage Brine—well water, potable water, rainwater, or brine (partially saturated to completely saturated) used as a displacing fluid in hydrocarbon storage well operations.

Manufactured Liner—any man-made synthetic material of sufficient size and qualities to sustain a hydraulic conductivity no greater than 1 x 10⁻⁷ cm/sec after installation and which is sufficiently reinforced to withstand normal wear and tear associated with the installation and pit use without damage to the liner or adverse affect on the quality thereof. For purposes of this Chapter and Chapter 5, a manufactured liner used in pit construction must meet or exceed the following standards.

Parameter or Test Standard		
Thickness (average)	> 10 mm (0.01 in)	
Breaking Strength (Grab Method)*	90 lbs	
Bursting Strength*	140 psi	
Tearing Strength*	25 lbs	
Seam Strength*	50 lbs	

*Testing is to be performed according to ASTM method D-751, latest revision.

Mining Water—well water, potable water, rainwater, or unsaturated brine which is injected into a brine solution mining well for recovery as saturated brine.

Nonhazardous Oilfield Waste—as defined in §501. [Editor's Note: See §501.E&P Waste]

NOW—nonhazardous oilfield waste.

Onsite—for purposes of this Section, on the same lease or contiguous property owned by the lessor, or within the confines of a drilling unit established for a specific well or group of wells.

Operation of Oil and Gas Facilities—as used in this Section, all oil and gas wells, disposal wells, enhanced recovery injection wells and facilities, flowlines, field storage and separation facilities, natural gas processing and/or gas sweetening plants, and compressor stations.

Pit—for purposes of this Chapter, a natural topographic depression or man-made excavation used to hold produced water or other nonhazardous oilfield waste, hydrocarbon storage brine, or mining water. The term does not include lined sumps less than 660 gallons or containment dikes, ring levees or firewalls constructed around oil and gas facilities.

Produced Water—liquids and suspended particulate matter that is obtained by processing fluids brought to the surface in conjunction with the recovery of oil and gas from underground geologic formations, with underground storage of hydrocarbons, or with solution mining for brine.

Production Pits—either earthen or lined storage pits for collecting NOW sediment periodically cleaned from tanks and other producing facilities, for storage of produced water or other nonhazardous oilfield wastes produced from the operation of oil and gas facilities, or used in conjunction with hydrocarbon storage and solution mining operations as follows.

- 1. Burn Pits—earthen pits intended for use as a place to temporarily store and periodically burn nonhazardous oilfield waste (excluding produced water) collected from tanks and facilities.
- 2. Compressor Station Pits—lined or earthen pits intended for temporary storage or disposal of fresh water condensed from natural gas at a gas pipeline drip or gas compressor station.
- 3. Natural Gas Processing Plant Pits—lined or earthen pits used for the storage of process waters or stormwater runoff. No produced water may be stored in a natural gas processing plant pit.
- 4. *Produced Water Pits*—lined or earthen pit used for storing produced water and other nonhazardous oilfield wastes, hydrocarbon storage brine, or mining water.
- 5. Washout Pits—lined earthen pits used to collect wash water generated by the cleaning of vacuum truck tanks and other vessels and equipment only used to transport nonhazardous oilfield waste. Any materials other than NOW are prohibited from being placed in such pits.
- 6. Well Test Pits—small earthen pits intended for use to periodically test or clean up a well.
- 7. Emergency Pits—lined or earthen pits used to periodically collect produced water and other NOW fluids only during emergency incidents, rupture or failure of other facilities.
- 8. Onshore Terminal Pits—lined or earthen pits located in the coastal area used for storing produced water at terminals that receive crude oil and entrained water by pipeline from offshore oil and gas production facilities.
- 9. Salt Dome Cavern Pits—lined or earthen pits located in the coastal area associated with the storage of petroleum products and petroleum in salt dome caverns.

Reserve Pits—temporary earthen pits used to store only those materials used or generated in drilling and workover operations.

Submerged Wetland Area—a wetland area which is normally inundated with water and where only levee material is available for mixing with waste fluids during closure of a pit.

Underground Source of Drinking Water (USDW)— for the purpose of administering these rules and regulations is defined in §403.B.

Upland Area—an area which is not identified as a wetland and includes farm land, pasture land, recreational land, and residential land.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et seq}$.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2798 (December 2000).

§303. General Requirements

- A. Produced water generated from the drilling and production of oil and gas wells shall be disposed of into subsurface formations, unless discharged or disposed of according to the provisions of §303.E, or transported offsite in accordance with LAC 43:XIX, Subpart 1, Chapter 5.
- B. Produced water may be disposed of by subsurface injection into legally permitted or authorized operators saltwater disposal wells, commercial saltwater disposal wells, enhanced recovery injection wells, community saltwater disposal wells, or gas plant disposal wells. The use of hydrocarbon storage brine and mining water in storage and/or mining operations is not considered to be disposal.
- C. Contamination of a groundwater aquifer or a USDW with NOW is strictly prohibited. In addition, the injection of NOW into a groundwater aquifer or a USDW is strictly prohibited.
- D. Produced water and other NOW generated in the drilling and production of oil and gas wells shall not be disposed of into a zone producing or productive of hydrocarbons except as provided for in LAC 43:XIX.303.O or such disposal is approved by the Office of Conservation after a public hearing or unless prior approval to use the proposed zone for such disposal can be documented.
- E. The discharge of produced water or other NOW (including drilled solids) into manmade or natural drainage or directly into state waters is allowed only in conformance with any applicable state or federal discharge regulatory program.
- F. The use of closed NOW storage systems is encouraged by the Office of Conservation; therefore, the use of new or existing pits to store produced water, drilling fluids, and other NOW generated from the drilling and production of oil and gas wells is prohibited unless:
- 1. notification for each pit is submitted to the Office of Conservation as outlined in §305; and
- 2. pits are in conformance with standards set forth in §307.

- G. Unless exempted from liner requirements in §303.K.8 or §303.M below, all existing produced water pits, onshore terminal pits, and washout pits which are to be utilized in the operation of oil and gas or other facilities must be shown to comply with the liner requirements of §307.A.1.a or be permanently closed in accordance with the pit closure criteria of §311 and §313 by January 20, 1989. A certification attesting to compliance with these requirements shall be submitted to this office in a timely manner.
- H. All existing pits which are not to be utilized in the operation of oil and gas or other facilities must be permanently closed according to the requirements of §311 and §313 by January 20, 1989. A certification attesting to compliance with these requirements shall be submitted to this office in a timely manner.
- I. Operators of existing pits are required to comply with all applicable operational requirements of §307.A.2 and 4, §307.B.1, 2, and 3, §307.C.2, 4, 5, and 6, §307.D.2, 4, and 5, §307.E.1, 3, 4, and 6, and §307.F.1 and 3.
- J. Production pits, except for those identified in §303.K.1 and §303.M below, may not be constructed in a "V" or A zone as determined by flood hazard boundary or rate maps and other information published by the Federal Emergency Management Agency (FEMA), unless such pits have levees which have been built at least 1 foot above the 100-year flood level and able to withstand the predicted velocity of the 100-year flood. Location, construction and use of such pits is discouraged.
- K. Production pits located in the coastal area shall be subject to the following requirements.
- 1. Except for exempt pits, no production pit may be constructed in the coastal area after June 30, 1989.
- 2. Production pits located in the coastal area shall be closed in compliance with §311 and §313 by January 1, 1993 with the following exceptions:
 - a. exempt pits as such term is defined in §301;
- b. any onshore terminal pit that was in existence on June 30, 1989, provided such pit has an approved Louisiana Water Discharge Permit System (LWDPS) permit applicable thereto. Upon expiration of such permit, operator shall discontinue use of said pit and comply with the provisions of §307;
- c. any production pit which is subject to an approved Louisiana Water Discharge Permit System (LWDPS) permit is not subject to the closure requirements of §311 and §313 until January 1, 1995 or until expiration of such permit which ever occurs first. Upon expiration of such permit, operator shall discontinue use of said pit and comply with the provisions of §307.
- 3. Operators of existing production pits located in the coastal area shall submit Form UIC-15-CP to the Office of Conservation by January 1, 1991. Pits closed prior to October 20, 1990 are not considered existing pits for purposes hereof.

- 4. Operators intending to construct an exempt pit shall submit Form UIC-15-CP to the Office of Conservation at least 10 days prior to start of construction thereof.
- 5. Production pits located within the coastal area must maintain a levee with an elevation of at least 2 feet above mean high tide, the liquid level in pit(s) shall not be permitted to rise within 2 feet of top of pit levee or walls, and any surface water discharge from an active pit must be done in accordance with appropriate state or federal regulatory programs. Such discharge must be piped to open water (within the marsh) that receives good flushing action and shall not otherwise significantly increase the salinity of the receiving body of water or marsh. Further, unless otherwise indicated in §303.K.6, 7, 8 and 9, production pits located in the coastal area shall comply with the standards and operational requirements set forth in §307.
- 6. Burn pits, compressor station pits, natural gas processing plant pits, and well test pits located in the coastal area are exempt from the liner requirements of §307.A.
- 7. Salt dome cavern pits are exempt from the liner requirements of §307.A.
- 8. Produced water pits, washout pits, and onshore terminal pits located in the coastal area shall comply with the liner requirements of §307.A unless such pit is subject to an approved Louisiana Water Discharge Permit System (LWDPS) permit.
- 9. Emergency pits located in the coastal area shall comply with the requirements of §307.E unless such pit is subject to an approved Louisiana Water Discharge Permit System (LWDPS) permit.
- 10. Any production pit which is not subject to an approved Louisiana Water Discharge Permit System (LWDPS) permit on October 20, 1990 shall submit a closure plan to the Office of Conservation by January 1, 1991.
- L. Within six months of the completion of the drilling or workover of any permitted well, the operator (generator) shall certify to the commissioner by filing Form UIC-16 the types and number of barrels of NOW generated, the disposition of such waste, and further certify that such disposition was conducted in accordance with applicable rules and regulations of the Office of Conservation. Such certification shall become a part of the well's permanent history.
- M. Based upon the best practical technology, production pits located within an 'A' zone (FEMA) which meet the following criteria are not subject to the levee height requirements of §303.J above or the liner requirements of §307.A.1:
 - 1. pit size is less than or equal to 10' x 10' x 4' deep;
 - 2. such pit contains only produced brine; and
- 3. such pit is utilized for gas wells producing less than 25 mcf per day and less than or equal to 1 barrel of saltwater per day (bswpd).

- N. Evidence of contamination of a groundwater aquifer or USDW may require compliance with the monitoring program of §309, compliance with the liner requirements of §307.A.1, or immediate closure of the pit.
- O. The commissioner may authorize, without the necessity of a public hearing, the disposal of produced water into a zone producing or productive of hydrocarbons upon application of the operator of an existing or proposed disposal well. Such written request shall include the following:
- 1. the appropriate permit application as per the requirements of LAC 43:XIX.Chapter 4;
- 2. evidence establishing the production mechanism of the proposed disposal zone is aquifer expansion (water drive);
- 3. evidence demonstrating the subject disposal well is not productive in the proposed disposal zone;
- 4. a plat showing the subject disposal well is not located within 330' of a property line as it is defined in LAC 43:XIX.1901;
- 5. written consent of all operators of record with existing wells within a 1/4 mile radius of the subject well; and
- 6. such other information which the commissioner may require.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2799 (December 2000), amended LR 30:254 (February 2004).

§305. Notification

A. Existing Pits

- 1. Each pit which was constructed prior to January 20, 1986, is an existing pit. Use of an existing pit is prohibited unless the operator has reported that pit to the Office of Conservation by July 20, 1986, according to the requirements of this Paragraph. Notification shall contain the information requested below. Pits closed prior to January 20, 1986, are not considered existing pits.
- 2. Operators of existing pits must submit the following information to the Office of Conservation by July 20, 1986:
- a. for each existing pit to be utilized in the operation of oil and gas facilities, the information requested in §305.D.1-8 below;
- b. for each existing pit not to be utilized in the operation of oil and gas facilities the information requested in §305.D.1-6 below;
- c. a plan and schedule of abandonment for closure of pits identified in §305.A.2.b above. Such plan must comply with the provisions of §303.H, §311, and §313. Failure to comply with the plan in a timely manner will subject an operator to appropriate civil penalties.
- 3. Operators of existing pits in the coastal area shall comply with the requirements of §303.K.3.

- B. New Pits. Except for reserve pits, operators must notify the Office of Conservation of the intent to construct new pits at least 10 days prior to start of construction. Notification shall contain all information requested in §305.D or §303.K.4 as appropriate. The Office of Conservation may inspect any proposed pit site prior to or during construction; however, initial use of the completed pit need not be deferred if no inspection is made.
- C. Reserve Pit Notification. For reserve pits used in drilling and workover operations, notification requirements of this rule shall be satisfied by application for a drilling or work permit.
 - D. Notification Information Required—Form UIC-15
- 1. Name of facility pit (indicate whether new or existing);
 - 2. field designation, if applicable;
- 3. section, township and range (include approximate footage location of pit center);
 - 4. parish name;
 - 5. type of pit (consistent with definitions in §301);
 - 6. size of pit (length, width and depth);
 - 7. type of liner if applicable;
- 8. certification that each pit will or does conform to standards stipulated under §307 applicable to that type pit and that such compliance will be within the time frame described in §303.G, H, and I, if applicable.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et seq}$.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2801 (December 2000).

§307. Pit Classification, Standards, and Operational Requirements

- A. Produced Water, Onshore Terminal, and Washout Pits
- 1. Except where exempted by §303.K.8 and §303.M, groundwater aquifer and USDW protection for above-listed pits shall be provided by one of the following:
- a. a liner along the bottom and sides of pits which has the equivalent of 3 continuous feet of recompacted or natural clay having a hydraulic conductivity no greater than 1×10^{-7} cm/sec. Such liners include, but are not limited to the following:
- i. *Natural Liner*—natural clay having a hydraulic conductivity meeting the requirements of §307.A.1.a above;
- ii. Soil Mixture Liner—soil mixed with cement, clay-type, and/or other additives to produce a barrier which meets the hydraulic conductivity requirements of §307.A.1.a above;
- iii. Recompacted Clay Liner—in situ or imported clay soils which are compacted or restructured to meet the hydraulic conductivity requirements of §307.A.1.a above;

- iv. *Manufactured Liner*—synthetic material that meets the definition in §301 and is equivalent or exceeds the hydraulic conductivity requirements of §307.A.1.a above. Pits constructed with a manufactured liner must have side slopes of 3:1 and the liner at the top of the pit must be buried in a 1-inch wide and 1-inch deep trench. A sufficient excess of liner material shall be placed in the pit to prevent tearing when filled with NOW;
- v. Combination Liner—a combination of two or more types of liners described in this Section which meets the hydraulic conductivity requirements of §307.A.1.a above:
- b. any other alternate groundwater aquifer and USDW protection system acceptable to the Office of Conservation.
- 2. Pits shall be protected from surface waters by levees or walls and by drainage ditches, where needed, and no siphon or openings will be placed in or over levees or walls that would permit escaping of contents so as to cause pollution or contamination. Authorized surface discharges of pit contents under federal and/or state regulatory programs are not considered to be pollution or contamination as used herein.
- 3. A representative of the Office of Conservation must be given an opportunity to inspect prior to and during construction of the pit as provided under §305.B.
- 4. Liquid levels in pits shall not be permitted to rise within 2 feet of top of pit levees or walls. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 5. When use of a pit will be permanently discontinued by the operator of record, the Office of Conservation shall be notified in writing. Pits shall be emptied of all fluids in a manner compatible with all applicable regulations and closed in accordance with §303.F and G within six months of abandonment.

B. Reserve Pits

- 1. Pits shall be protected from surface waters by levees or walls and by drainage ditches, where needed, and no siphons or openings will be placed in or over levees or walls that would permit escaping of contents so as to cause pollution or contamination. Authorized surface discharges of pit contents under federal or state regulatory programs are not considered to be pollution or contamination as used herein.
- 2. Liquid levels in pits shall not be permitted to rise within 2 feet of top of pit levees or walls. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 3. Operators shall prevent the placing of produced water, waste oil, trash, or any other material into a reserve pit which would increase the difficulty in clean-up of the pit or otherwise harm the environment. Such material shall be properly stored and disposed of according to applicable state or federal regulations.

4. Pits shall be emptied of fluids in a manner compatible with all applicable regulations, and closed in accordance with §311 and §313 within six months of completion of drilling or work over operations.

C. Burn Pits

- 1. Pits shall be constructed in such a manner as to keep fire hazards to a minimum, and in no case shall be located less than 100 feet from a well location, tank battery, separator, heater-treater, or any and all other equipment that may present a fire hazard.
- 2. Pits shall be protected from surface waters by levees or walls and by drainage ditches, where needed, and no siphons or openings will be placed in or over levees or walls that would permit escaping of contents so as to cause pollution or contamination.
- 3. A representative of the Office of Conservation must be given an opportunity to inspect prior to and during construction of the pit as provided under §305.B.
- 4. Any burning process shall be carried out in conformance with applicable air quality regulations. Notification as required by said regulation shall be made to the Air Quality Division, Department of Environmental Quality.
- 5. No produced water, radioactive material (except industry-accepted and license-approved radioactive material utilized in oilfield operations, and radioactive material naturally occurring in the produced fluids), or other noncombustible waste products shall be placed in pits, except water or emulsion which may be associated with crude oil swabbed or otherwise produced during test operations, or during tank or other vessel cleaning operations. NOW must be removed or burned periodically to assure that storage of materials in the pit is kept to a minimum.
- 6. Liquid levels in pits shall not be permitted to rise within 2 feet of top of pit levees or walls. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 7. When use of pits will be permanently discontinued by the operator of record, the Office of Conservation shall be notified in writing. Pits shall be emptied of fluids in a manner compatible with all applicable regulations, and closed in accordance with §311 and §313 within six months of abandonment.

D. Well Test Pits

- 1. Pits shall be constructed in such a manner as to keep fire hazards to a minimum, and in no case shall be located less than 100 feet from a well location, tank battery, separator, heater-treater, or any and all other equipment that may present a fire hazard.
- 2. Pits shall be protected from surface waters by levees or walls and by drainage ditches, where needed, and no siphons or openings will be placed in or over levees or walls that would permit escaping of contents so as to cause pollution or contamination.

- 3. A representative of the Office of Conservation must be given an opportunity to inspect prior to and during construction of the pit as provided under §305.B.
- 4. Within 30 days after completion of a well test, pits shall be emptied of produced fluids and must remain empty of produced fluids during periods of nonuse.
- 5. Liquid levels in pits shall not be permitted to rise within 2 feet of top of pit walls or dikes. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 6. When use of pits will be permanently discontinued, the Office of Conservation shall be notified in writing. Pits shall be emptied of fluids in a manner compatible with all applicable regulations, and closed in accordance with §311 and §313 within six months of abandonment.

E. Emergency Pits

- 1. Groundwater aquifer and USDW protection for emergency pits shall be evaluated on a case-by-case basis. Operators who intend to utilize existing or new emergency pits without liners must demonstrate by written application to the Office of Conservation that groundwater aquifer and USDW contamination will not occur; otherwise, emergency pits shall be lined. Applications to demonstrate unlined pits will not contaminate groundwater aquifers and USDWs shall at a minimum address the following.
- a. *Emergency Incident Rate*—operator shall estimate the number of times a pit will be utilized each year. A detailed discussion of the facility operation and reasons for the emergency incident rate must be addressed.
- b. *Soil Properties*—operator shall describe and evaluate soil properties onsite. Soil hydraulic conductivity and physical properties must be addressed to assess potential groundwater aquifer and USDW impacts.
- c. Groundwater Aquifer Evaluation—water quality, groundwater aquifer, and USDW depth shall be evaluated.
- d. *Produced Water Composition* (total dissolved solids and oil and grease)—must be determined to assess potential impacts on the site.
- 2. All emergency pits required to be lined must conform to hydraulic conductivity requirements in §307.A.1 above.
- 3. No produced water or any other NOW shall be intentionally placed in any emergency pit not meeting the hydraulic conductivity requirements (1 x 10⁻⁷ cm/sec for 3 continuous feet of clay) except in the case of an emergency incident. In emergency situations, notice must be given to the Office of Conservation within 24 hours after discovery of the incident. Produced water and any other NOW must be removed from the pit within seven days following termination of the emergency situation.
- 4. Pits shall be protected from surface waters by levees and by drainage ditches, where needed, and no siphons or openings will be placed in or over levees or walls

- that would permit escaping of contents so as to cause pollution or contamination. Surface discharges of pit contents under federal or state permits are not considered to be pollution or contamination as used herein.
- 5. A representative of the Office of Conservation must be given an opportunity to inspect prior to and during construction of the pits as provided under §305.B.
- 6. Liquid level in pits shall not be permitted to rise within 2 feet of top of pit levees. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 7. When use of pits will be permanently discontinued, the Office of Conservation shall be notified in writing. After notification to the Office of Conservation, pits shall be emptied of all fluids in a manner compatible with all applicable regulations, and closed in accordance with §311 and §313 within six months of abandonment.
- F. Natural Gas Processing Plant Pits, Compressor Station Pits, and Salt Dome Cavern Pits
- 1. Pits shall be protected from surface waters by levees or walls and by drainage ditches, where needed, and no siphon or openings will be placed in or over levees or walls that would permit escaping of contents so as to cause pollution or contamination. Authorized surface discharges of pit contents under federal and/or state regulatory programs are not considered to be pollution or contamination as used herein.
- 2. A representative of the Office of Conservation must be given an opportunity to inspect prior to and during construction of the pit as provided under §305.B.
- 3. Liquid levels in pits shall not be permitted to rise within 2 feet of top of pit levees or walls. Pit levees or walls shall be maintained at all times to prevent deterioration, subsequent overfill, and leakage of NOW to the environment.
- 4. When use of a pit will be permanently discontinued by the operator of record, the Office of Conservation shall be notified in writing. Pits shall be emptied of all fluids in a manner compatible with all applicable regulations and closed in accordance with §311 and §313 within six months of abandonment.
- G. Office of Conservation Corrective Action and Closure Requirement. Should the Office of Conservation determine that continued operation of pits specified in this Subparagraph may result in contamination of a groundwater aquifer or a USDW, or the discharge of fluids into man-made or natural drainage or directly into state waters, or contamination of soils outside the confines thereof, further use of the pit shall be prohibited until conditions causing or likely to cause contamination have been corrected. If corrective measures are not satisfactorily completed in accordance with an Office of Conservation compliance order or schedule, the commissioner may require closure of the pit. When an order for closure is issued, a pit shall be closed in accordance with §311 and §313 and the operator must comply with any closure schedule issued by the Office of Conservation.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2801 (December 2000).

§309. Monitoring Program

- A. Upon a determination by the operator or the Office of Conservation that any pit subject to this rule is likely to contaminate a groundwater aquifer or a USDW, the Office of Conservation shall require the timely submission of a plan for the prevention of such contamination. Such plan may include using an under-built drainage and collection system, monitoring wells, and/or other means that the Office of Conservation may approve to prevent or detect contamination. Any required monitor wells shall be registered with the appropriate state agency.
- B. When required by the Office of Conservation, monitoring shall be conducted on a quarterly schedule. A written report summarizing the results of such monitoring shall be submitted to the Office of Conservation within 30 days of the end of each quarter.
- C. If monitoring of a groundwater aquifer or USDW indicates contamination due to a discharge from a pit, the owner or operator shall immediately notify the Office of Conservation. Within 30 days, the operator shall empty the pit of all NOW and submit a remedial plan for prevention of further contamination of any groundwater aquifer or any USDW. Upon approval, the remedial plan shall be implemented by the operator and monthly progress reports, reviewing actions taken under the plan and their results, will be filed with the Office of Conservation until all actions called for in the plan have been satisfactorily completed.
- D. Notification received by the Office of Conservation, pursuant to §309.A, B, or C above, of any contamination of a groundwater aquifer or a USDW as the possible result of a discharge, or information obtained by the exploitation of such notification shall not be used against the reporting owner or operator in any criminal action, including but not limited to those provided for by Louisiana Revised Statutes 30:18, except in a prosecution for perjury or for giving a false statement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2803 (December 2000).

§311. Pit Closure

A. Pits must be closed properly to assure protection of soil, surface water, groundwater aquifers and USDWs. Operators may close pits utilizing onsite land treatment, burial, solidification or other techniques approved by the Office of Conservation only if done so in compliance with §313 and §315. Otherwise, all NOW must be manifested according to §511 and transported offsite to a permitted commercial facility.

- B. Liability for pit closure shall not be transferred from an operator to the owner of the surface land(s) on which a pit is located.
- C. For evaluation purposes prior to closure of any pit and for all closure and onsite and offsite disposal techniques, excluding subsurface injection of reserve pit fluids, nonhazardous oilfield waste (pit contents) must be analyzed for the following parameters:
 - 1. pH;
 - 2. total metals content (ppm) for:
 - a. arsenic;
 - b. barium;
 - c. cadmium;
 - d. chromium;
 - e. lead;
 - f. mercury;
 - g. selenium;
 - h. silver;
 - i. zinc;
 - 3. oil and grease (percent dry weight);
 - 4. soluble salts and cationic distributions:
- a. electrical conductivity—EC in mmhos/cm (millimhos);
 - b. sodium adsorption ratio—SAR;
- c. exchangeable sodium percentage—ESP (percent); and
- d. cation exchange capacity—CEC (milliequivalents/100 gm soil).
- 5. Radioisotopes if such pit is located in the coastal area and is closed after October 20, 1990.
- D. Laboratory Procedures for Nonhazardous Oilfield Waste Analyses
- 1. For soluble salts, cationic distributions, metals (except barium) and oil and grease (organics) samples are to be analyzed using standard soil testing procedures as presented in the Laboratory Manual for the Analysis of Oilfield Waste (Department of Natural Resources, August 9, 1988, or latest revision).
- 2. For barium analysis, samples are to be digested in accordance with the "True Total" method, as presented in the Laboratory Procedures Manual for the Analysis of Oilfield Waste (Department of Natural Resources, August 9, 1988 or latest revision).
- 3. For radioisotopes, the sampling and testing of pit sludges shall comply with the provisions of Department of Environmental Quality, NORM Regulatory Guide, dated March 12, 1990 or latest revision thereof.

- E. Documentation of testing and closure activities, including onsite disposal of NOW, shall be maintained in operator's files for at least three years after completion of closure activities. Upon notification, the Office of Conservation may require the operator to furnish these data for verification of proper closure of any pit. If proper onsite closure has not been accomplished, the operator will be required to bring the site into compliance with applicable requirements.
- F. Reserve pits utilized in the drilling of wells less than 5,000 feet in depth are exempt from the testing requirements of §311.C and §313 provided the following conditions are met:
- 1. the well is drilled using only freshwater "native" mud which contains no more than 25 lbs/bbl bentonite, 0.5 lbs/bbl caustic soda or lime, and 50 lbs/bbl barite; and
- 2. documentation of the above condition is maintained in the operator's files for at least three years after completion of pit closure activities.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2803 (December 2000).

§313. Pit Closure Techniques and Onsite Disposal of NOW

Editor's Note: The telephone number listed in §313.G.2.i is not a valid phone number.

- A. Reserve pit fluids, as well as drilling muds, cuttings, etc. from holding tanks, may be disposed of onsite provided the technical criteria of §313.C, D, E, or F below are met, as applicable. All NOW must be either disposed of on-site or transported to an approved commercial facility or transfer station in accordance with the requirements of LAC 43:XIX, Chapter 5 or under the direction of the commissioner.
- B. Prior to conducting onsite pit closure activities, an operator must make a determination that the requirements of this Subparagraph are attainable.
- C. For all pit closure techniques in this Subsection, except solidification, waste/soil mixtures must not exceed the following criteria:
 - 1. range of pH: 6-9;
 - 2. total metals content (ppm):

Parameter	Limitation
Arsenic	10
Barium	
Submerged Wetland Area	20,000
Elevated Wetland Area	20,000
Upland Area	40,000
Cadmium	10
Chromium	500
Lead	500
Mercury	10
Selenium	10
Silver	200
Zinc	500

- D. Land Treatment. Pits containing NOW may be closed onsite by mixing wastes with soil from pit levees or walls and adjacent areas provided waste/soil mixtures at completion of closure operations do not exceed the following criteria, as applicable, unless the operator can show that higher limits for EC, SAR, and ESP can be justified for future land use or that background analyses indicate that native soil conditions exceed the criteria.
- 1. In addition to the pH and metals criteria listed in §313.C above, land treatment of NOW in submerged wetland, elevated wetland, and upland areas is permitted if the oil and grease content of the waste/soil mixture after closure is < 1 percent (dry weight).
- 2. Additional parameters for land treatment of NOW in elevated, freshwater wetland areas where the disposal site is not normally inundated:
- a. electrical conductivity (EC-solution phase): < 8 mmhos/cm;
- b. sodium adsorption ratio (SAR-solution phase): < 14;
- c. exchangeable sodium percentage (ESP-solid phase): 25 percent.
- 3. Additional parameters for land treatment of NOW in upland areas:
- a. electrical conductivity (EC-solution phase): < 4 mmhos/cm;
- $b. \quad sodium \ adsorption \ ratio \ (SAR-solution \ phase): \\ < 12;$
- c. exchangeable sodium percentage (ESP-solid phase): < 15 percent.
- E. Burial or Trenching. Pits containing NOW may be closed by mixing the waste with soil and burying the mixture onsite, provided the material to be buried meets the following criteria:
 - 1. the pH and metals criteria in §313.C above;
 - 2. moisture content: < 50 percent by weight:
 - 3. electrical conductivity (EC): < 12 mmhos/cm;
 - 4. oil and grease content: < 3 percent by weight;
- 5. top of buried mixture must be at least 5 feet below ground level and then covered with 5 feet of native soil;
- 6. bottom of burial cell must be at least 5 feet above the seasonal high water table.
- F. Solidification. Pits containing NOW may be closed by solidifying wastes and burying it onsite provided the material to be buried meets the following criteria:
 - 1. pH range: 6 12;
- 2. leachate testing* for oil and grease: < 10.0 mg/1 and chlorides < 500.0 mg/1;

*NOTE: The leachate testing method for oil and grease is included in the Laboratory Manual for the Analysis of Oilfield Waste (Department of Natural Resources, August 9, 1988, or latest revision).

- 3. leachate testing* for the following metals:
 - a. Arsenic < 0.5 mg/1;
 - b. Barium < 10.0 mg/l;
 - c. Cadmium < 0.1 mg/1;
 - d. Chromium < 0.5 mg/1;
 - e. Lead < 0.5 mg/1;
 - f. Mercury < 0.02 mg/1;
 - g. Selenium < 0.1 mg/1;
 - h. Silver < 0.5 mg/1;
 - i. Zinc < 5.0 mg/1;
- *NOTE: The leachate testing method for metals is included in the Laboratory Manual for the Analysis of Oilfield Waste (Department of Natural Resources, August 9, 1988, or latest revision).
- 4. top of buried mixture must be at least 5 feet below ground level and covered with 5 feet of native soil;
- 5. bottom of burial cell must be at least 5 feet above the seasonal high water table;
- 6. solidified material must meet the following criteria*:
- a. unconfined compressive strength (Qu): > 20 lbs/in² (psi);
 - b. permeability: $< 1 \times 10^{-6}$ cm/sec;
 - c. wet/dry durability: > 10 cycles to failure.
 - *NOTE: Testing must be conducted according to ASTM or other approved methods prior to pit closure by solidification processes.

G. Passive Closure

- 1. The Office of Conservation will consider requests for passive pit closure provided one of the following conditions exists:
- a. where pit closure would create a greater adverse environmental impact than if the pit were allowed to remain unreclaimed;
- b. where pit usage can be justified for agricultural purposes or wildlife/ecological management.
- 2. Operators requesting passive pit closure shall submit the following:
- a. an affidavit requesting passive pit closure for one of the reasons contained in §313.G1;
- b. a copy of Form UIC-15 or UIC-15-CP with pit identification number shown thereon;
- c. an affidavit of no objection from the Louisiana Department of Wildlife and Fisheries obtainable by contacting:

LA Department of Wildlife and Fisheries P.O. Box 9800 Baton Rouge, LA 70898 Telephone: (225) 765-2367 d. where applicable, an affidavit of no objection from the Department of Natural Resources, Coastal Management Division, obtainable by contacting:

Department of Natural Resources Coastal Management Division P.O. Box 44487 Baton Rouge, LA 70804-4487 Telephone: (225) 342-7591

- e. an affidavit of no objection from the landowner endorsing operator's request for passive pit closure;
 - f. a photograph of the pit in question;
- g. an inspection of the pit signed by a conservation enforcement agent and a representative of the operator. The operator shall contact the applicable conservation district office to arrange date and time for inspection;
- h. analytical laboratory reports of the pit bottoms and pit levees indicating conformance with applicable land treatment criteria set forth in §313.C and D;
- i. an analytical laboratory report of the fluid contents of the pit indicating conformance with applicable state and federal discharge regulatory program. Contact the Department of Environmental Quality, Water Pollution Control Division, (225) 342-6363 for information regarding effluent limitations.
- 3. The Commissioner of Conservation retains the right to grant exceptions to the requirements of §313.G.2 as he deems appropriate.

H. Offsite Disposal of NOW

- 1. Except for produced water, drilling, workover and completion fluids, and rainwater which may be transported by an oil and gas operator to a community well or an operators permitted Class II disposal well or discharged to surface waters where authorized, nonhazardous oilfield waste shall not be moved offsite for storage, treatment, or disposal unless transported to an approved commercial facility or transfer station in accordance with the requirements of LAC 43:XIX, Chapter 5 or under the direction of the commissioner.
- 2. The criteria for land treatment, burial, or solidification listed above will apply, as appropriate, to the onsite disposal of any nonhazardous oilfield waste remaining onsite.
- 3. NOW that fails to meet the criteria of this Paragraph for onsite disposal shall be moved offsite by the operator to a permitted commercial facility or transfer station in accordance with the requirements of LAC 43:XIX, Chapter 5.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2804 (December 2000).

§315. Disposal of Reserve Pit Fluids by Subsurface Injection

A. General Provisions

- 1. The disposal (subsurface injection) of drilling and workover waste fluids (including reserve pit fluids) into (1) a newly drilled well which is to be plugged and abandoned; or (2) into the casing annulus of a well being drilled, a recently completed well, or a well which has been worked over is prohibited, except when such injection is conducted in accordance with the requirements of this Subsection.
- 2. Injection of drilling and workover waste fluids shall not commence until approval has been granted by the Office of Conservation. Operators may apply for approval when applying for a drilling permit. Approval for injection into a well will remain valid for subsequent workovers provided the criteria in §315.C below continue to be met.
- 3. Injection of drilling and workover waste fluids (including reserve pit fluids) shall be limited to injection of only those fluids generated in the drilling, stimulation or workover of the specific well for which authorization is requested. Reserve pit fluids may not be transported from one well location to another for injection purposes.
- 4. Injection of drilling and workover waste pit fluids into zones that have been tested for hydrocarbons or are capable of hydrocarbon production is prohibited, except as otherwise provided by the commissioner.
- 5. Pump pressure shall be limited so that vertical fractures will not extend to the base of the USDW and/or groundwater aquifer.
- 6. A drilling and workover waste fluids injection site may be inspected by a duly authorized representative of the commissioner prior to approval.
- 7. Drilling and workover waste fluids to be injected pursuant to the provisions of this Section are exempt from the testing requirements of §311.C.

B. Application Requirements

- 1. Prior to the onsite injection of reserve pit fluids, an application shall be filed by the well operator on the appropriate form. The original and one copy of the application (with attachments) shall be submitted to the Office of Conservation for review and approval.
- 2. An application for approval of reserve pit fluid injection shall include:
 - a. schematic diagram of well showing:
 - i. total depth of well;
- ii. depths of top and bottom of all casing strings and the calculated top of cement on each;
 - iii. size of casing; and
 - iv. depth of the deepest USDW;

- b. operating data:
 - i. maximum pressure anticipated; and
- ii. estimated volume of fluids to be injected;
- c. a copy of the electric log of the well (if run) or a copy of the electric log of a nearby well;
- d. additional information as the commissioner may require.

C. Criteria for Approval

- 1. Casing string injection may be authorized if the following conditions are met and injection will not endanger underground sources of drinking water:
- a. surface casing annular injection may be authorized provided the surface casing is set and cemented at least 200 feet below the base of the lowermost USDW, except as otherwise provided by the commissioner; or
- b. injection through perforations in the intermediate or production casing may be authorized provided that intermediate or production casing is set and cemented at least 200 feet below the base of the lowermost USDW, except as otherwise provided by the commissioner.
- 2. Surface casing open hole injection may be approved provided the surface casing is set and cemented at least 200 feet below the lowermost USDW and a cement plug of at least 100 feet has been placed across the uppermost potential hydrocarbon bearing zone.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2805 (December 2000).

§317. Requirements for Community Saltwater Disposal Wells and Systems

- A. The use of a legally permitted saltwater disposal well and system for community saltwater disposal purposes is prohibited unless the disposal well system operator submits a statement of noncommercial operation and the information requested in §317.B below to the Office of Conservation. Such statement must indicate that the operators using the community saltwater disposal system share only in the cost of operating and maintaining the well and related storage tanks and equipment (system).
- B. The operator of an existing or proposed community saltwater disposal well and system must submit the following information to the Office of Conservation:
- 1. the name of the community saltwater disposal system including the disposal well name(s) and number(s), serial number(s), field, and section, township, and range;
- 2. a list of the operators using the community saltwater disposal system;
- 3. a list of the producing wells (well name, number, and serial number) from which saltwater going into the community saltwater system is generated;

- 4. the approximate number of barrels per month of saltwater received from each producing well;
- 5. the method of transportation of the saltwater to the community system (i.e., truck, pipeline, etc.).
- C. Within six months of the effective date of this amendment and annually thereafter, the operator of an existing community saltwater disposal system shall report the information required in §317.B above to the Office of Conservation.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2806 (December 2000).

§319. Exceptions

A. The commissioner may grant an exception to any provision of this amendment upon proof of good cause. The operator must show proof that such an exception will not endanger USDWs.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2806 (December 2000).

§321. Effect on Existing Special Orders

A. This order shall supersede §129 of Office of Conservation Statewide Order No. 29-B (effective November 1, 1967). Any existing special orders authorizing disposal of saltwater under conditions which do not meet the requirements hereof shall be superseded by this amendment and the operator shall obtain authority for such disposal after complying with the provisions hereof.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2806 (December 2000).

§323. Applicability

A. All oil and gas and commercial facility operators shall be required to comply with applicable portions of this amendment within 90 days of the effective date, provided that all existing commercial facility operators shall be exempt from all permit application and public hearing requirements under §507 of this order. Failure to comply with this requirement in a timely manner will subject an operator to the suspension or revocation of his permit and/or the imposition of penalties pursuant to R.S. 30:18.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2807 (December 2000).

Chapter 4. Pollution Control (Class II Injection/Disposal Well Regulations)

Editor's Note: Statewide Order 29-B was originally codified in LAC 43:XIX as §129. In December 2000, §129 was restructured into Chapters 3, 4 and 5. Chapter 3 contains the oilfield pit regulations. Chapter 4 contains the injection/disposal well regulations. Chapter 5 contains the commercial facility regulations. A cross-reference chart in the December 2000 *Louisiana Register*, page 2798, indicates the locations for the rules in each existing Section.

§401. Definitions (reserved)

§403. Permits Required

- A. Permits are required for wells which inject fluids:
- 1. which are brought to the surface in connection with conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;
 - 2. for enhanced recovery of oil and natural gas; and
- 3. for storage of hydrocarbons which are liquid at standard temperature and pressure.
- B. Sub-surface injection or disposal by use of a well as described in §403.A.1 above is prohibited unless authorized by permit or rule. This authorization shall be conditioned upon the applicant taking necessary or corrective action to protect underground sources of drinking water as specified by the commissioner. *Underground source of drinking water* (USDW) means an aquifer or its portion:
 - 1. which supplies any public water system; or
- 2. which contains a sufficient quantity of ground water to supply a public water system; and
- a. currently supplies drinking water for human consumption; or
- b. contains fewer than 10,000 mg/1 total dissolved solids; and
- 3. which is not an exempted aquifer (see LAC 43:XVII.103.H).
- C. Existing enhanced recovery, saltwater disposal, and liquid hydrocarbon storage wells are authorized by rule and are not required to reapply for a new permit. However, they are subject to the provisions of §419.C.
- D. The provisions and requirements of this Section shall apply to underground injection by federal agencies or any other person whether or not occurring on property owned or leased by the United States.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2807 (December 2000).

§405. Application Requirements for New Enhanced Recovery Injection and New Saltwater Disposal Wells

- A. Each application for the approval of a new enhanced recovery injection well or disposal well shall be filed on Form MD-10-R and shall be verified by a duly authorized representative of the operator. The original and one copy of the application and two complete sets of attachments shall be furnished to the commissioner. An application for the approval of an injection well which is a part of a proposed enhanced recovery operation may be consolidated with the application for the approval of the enhanced recovery project (see §407).
- B. The application for the approval of an enhanced recovery injection or disposal well or wells shall be accompanied by:
- 1. a map showing the disposal well or enhanced recovery project area for which a permit is sought and the applicable area of review (for individual wells—1/4 mile radius; for enhanced recovery projects—the project area plus a circumscribing area the width of which is 1/4 mile) and the following information:
- a. within the area of review, the map must show the number or name and location of all existing producing wells, injection wells, abandoned wells and dry holes;
- b. identification of the surface owner of the land on which the enhanced recovery injection or disposal is to be located within the area of review;
- c. identification of each operator of a producing leasehold within the area of review:
- d. the map may also show surface bodies of water, mines (surface and subsurface), quarries and other pertinent surface features including residences and roads, and faults if known or projected; and
- e. only information on file with the Office of Conservation and pertinent information known to the applicant is required to be included on this map;
- 2. if the well has been drilled, a copy of the Well History and Work Resume Report (WH-1) and any available electric or radioactive log of the well. A descriptive statement of the proposed zone to be used for injection or disposal. The approximate depth of said zone in the case of undrilled wells along with an electric or radioactive log of a nearby well, if available;
 - 3. a schematic diagram of the well showing:
- a. the total depth, drilled out depth or plugged back depth of the well;
- b. the depth of the top of the injection or disposal interval;
- c. the geological name of the injection or disposal zone;

- d. the depths of the tops and bottoms of the casing and amount of cement used to cement each string of casing (every well used for injection shall be cased, cemented and tested in accordance with §§415 and 419 of this Order);
- e. the size of the casing and tubing, and the depth of the packer; and
 - f. the depth of the base of the deepest USDW;
- 4. information showing that injection into the proposed zone will not initiate fractures through the overlying strata which could enable the injection fluid or formation fluid to enter an underground source of drinking water. This requirement will be satisfied upon proper demonstration by the applicant that the pressure in the well at the depth of injection shall not exceed 75 percent of the pressure needed to fracture the formation;
 - 5. proposed operating data:
 - a. daily injection rates and pressures;
- b. geologic names, depths and location of injection fluid sources;
- c. qualitative and quantitative analysis of water from two or more existing water wells within 1/4 mile of proposed enhanced recovery injection or disposal well or wells. Give location of said water wells and date(s) samples were taken, or statement why samples were not submitted;
- d. qualitative and quantitative analysis of representative sample of water to be injected;
- e. geological name of injection zone and vertical distance separating top of injection zone from base of the deepest USDW, and a geological description of each major separating bed including individual bed thickness; and
- f. geological name, if known, and depth of the base of the deepest USDW.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2807 (December 2000).

§407. Application Requirements for Enhanced Recovery Projects

- A. An enhanced recovery project shall be permitted only by order of the commissioner after notice and public hearing.
- B. The application for a permit authorizing an enhanced recovery project shall contain the following:
- 1. the names and addresses of the operator or operators of the project;
- 2. in addition to the information on the map required in §405.B.1 above, show the lease, group of leases, unit or units included within the proposed project;
- 3. the common source or sources of supply in which all wells are currently completed;

- 4. the name, description and depth of each common source of supply to be affected;
- 5. a log of a representative well completed in the common source or sources of supply;
- 6. a description of the existing or proposed casing programs for injection wells, and the proposed method of testing all casing;
- 7. a description of the injection medium to be used, its source or sources and the estimated amounts to be injected daily;
- 8. for a project within an allocated pool, a tabulation showing recent gas-oil ratios and oil and water production tests for each of the producing oil and/or gas wells;
- 9. the proposed plan of development of the area included within the project; and
- 10. a schematic diagram of existing and/or proposed injection well(s) as set out in §405.B.3 of this Order.
- C. A copy of the application shall be mailed to each operator offsetting the project as shown on the application within five days after the application is filed. An affidavit of compliance with this rule shall be filed on or before the hearing.

D. Injectivity Tests and Pilot Projects

- 1. Injectivity Test. The commissioner may administratively approve for a period of one week an injectivity test in order to determine the injection rate, injectivity index, and/or pressure analysis of a well for enhanced recovery.
- a. Requests for injectivity tests must include the following:
 - i. well name and number;
 - ii. serial number;
 - iii. Form WH-1 of the well;
 - iv. schematic diagram of the well;
 - v. sand, reservoir, and field;
 - vi. brief discussion of the proposed test.
- b. The commissioner must be provided with the results of the injectivity test after completion.
- 2. Pilot Projects. The commissioner may administratively approve pilot projects for enhanced recovery for a period of six months from the date of initiation of injection.
- a. Requests for pilot projects must include Form UIC-2 EOR for each well to be used for injection within the project and such additional information the commissioner deems necessary to justify the approval of the pilot project.
- b. Wells used for injection within the pilot project are exempt from the provisions of §409 of this Order.

- c. Within 10 days of initiation of injection the operator must notify the commissioner in writing the date injection actually commenced.
- d. To continue operation beyond the six-month pilot project approval, the operator must obtain approval of an enhanced recovery project (prior to the expiration date of the administratively approved six-month pilot project) pursuant to the rules of procedure for conducting hearings before the Commissioner of Conservation, R.S. 30:5(C), R.S. 30:6, and §405.A and B, §407.A, B, and C of this Order.
- e. In the event the pilot project is unsuccessful, the operator must submit a letter to the commissioner requesting termination of such project.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2808 (December 2000).

§409. Permit Notice Requirements

- A. Applications for saltwater disposal, enhanced recovery wells or projects, and other Class II facilities shall be advertised in the official state journal.
- B. Notice requirements for commercial saltwater facilities can be found in LAC 43:XIX, Chapter 5 of this Order.

C. Public Hearings

- 1. If any person protests the application for a saltwater disposal or other Class II facility by filing written comments with the commissioner within 15 days following publication of notice, the application shall be set for public hearing at the election of the applicant or the commissioner.
- 2. All enhanced recovery well or project applications shall be approved only after a 30-day comment period and public hearing. The notice of hearing shall be mailed out to each interested owner and to each interested party.
- D. The commissioner may administratively approve or deny the application for a Class II well other than an enhanced recovery well or project, after review, without a public hearing if there are no comments received during the application comment period. If the commissioner denies administrative approval, the operator shall have a right to a public hearing on the decision.

E. Response to Comments

- 1. At the time that any final permit is issued, following a public hearing, the commissioner shall issue a response to comments. This response shall briefly describe and respond to all significant comments on the permit application raised during the public comment period, or during any hearing.
- 2. The response to comments shall be available to the public.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2808 (December 2000).

§411. Duration of Permits

- A. Permits authorizing injection into enhanced recovery injection wells and disposal wells shall remain valid for the life of the well, unless revoked by the commissioner for just cause.
- B. A permit granting underground injection may be modified, revoked and reissued, or terminated during its term for cause. This may be at the request of any interested person or at the commissioner's initiative. All requests shall be in writing and shall contain facts or reasons supporting the request.
- C. A permit may be modified, revoked and reissued, or terminated after notice and hearing, if:
- 1. there is a substantial change of conditions in the enhanced recovery injection well or the disposal well operation, or there are substantial changes in the information originally furnished;
- 2. information as to the permitted operation indicates that the cumulative effects on the environment are unacceptable, such as pollution of USDWs;
- 3. there are substantial violations of the terms and provisions of the permit; and
- 4. the operator has misrepresented any material facts during the permit issuance process.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2809 (December 2000).

§413. Transfer of Permits

A. A permit authorizing an enhanced recovery injection well or disposal well shall not be transferred from one operator to another without the approval of the commissioner (Form MD-10-R-A).

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2809 (December 2000).

§415. Construction Requirements for New Wells

- A. Each new enhanced recovery injection well or disposal well shall be completed, equipped, operated and maintained in a manner that will prevent endangerment of USDWs or damage to sources of oil or gas and will confine injected fluids to the interval or intervals approved.
- B. The casing and cementing program shall conform to the following requirements:
- 1. surface casing set through the base of the deepest USDW and cemented back to the surface in accordance with §109.B.1 of this Order; and
- 2. long string casing shall be cemented above the injection zone in accordance with §109.D.3 of this Order.

- C. Tubing and Packer. New wells drilled or existing wells converted for disposal after the effective date of this rule shall be equipped with tubing set on a mechanical packer. Packers shall be set no higher than 150 feet above the top of the disposal zone.
- D. Pressure Valves. The wellhead shall be equipped with aboveground pressure observation valves on the tubing and for each annulus of the well; said valves will be equipped with 1/2-inch female fittings. Operators of existing wells shall comply with this requirement by no later than six months after adoption of this amendment.
- E. Well History. Within 20 days after the completion or conversion of a disposal well, the owner or operator shall file in duplicate to the commissioner a completed Form WH-1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2809 (December 2000).

§417. Monitoring and Reporting Requirements

- A. The operator shall monitor injection pressure and injection rate of each enhanced recovery injection well or disposal well on a monthly basis with the results reported annually on Form UIC-10.
- B. The operator shall report on Form UIC-10 any casing annulus pressure monitoring used in lieu of pressure testing and any other casing annulus pressure test performed.
- C. All reports submitted to the Office of Conservation shall be signed by a duly authorized representative of the operator.
- D. The operator of an enhanced recovery injection well or disposal well shall, within 30 days, notify the commissioner of the date upon which injection or disposal commenced.
- E. The operator shall request permission from the commissioner for suspension of injection if an injection well or project is to be removed from service for a period of six months or more, and give reasons or justification for such suspension of injection. Said permission shall not exceed one year. After one year, the well or well(s) in a project shall be plugged and abandoned as outlined in §137 of this Order. The operator may request a hearing for an extension exceeding one year. Wells required for standby service, provided they meet all requirements for wells in active service, are exempt from the plugging requirements of this Subsection.
- F. The operator shall, within 30 days notify the commissioner of the date injection into an enhanced recovery injection well, enhanced recovery injection project or disposal well is terminated permanently and the reason therefore; at which time the permit authorizing the well or project shall expire. Notification of project injection termination must be accompanied by an individual well status report for all project injection wells.

G. Mechanical failures or downhole problems which indicate an enhanced recovery injection well or disposal well is not, or may not be, directing the injected fluid into the permitted or authorized injection zone may be cause to shutin the well. If said condition may endanger a USDW, the operator shall orally notify the commissioner within 24 hours at (225) 342-5515. Written notice of this failure shall be submitted to the Office of Conservation within five days of the occurrence together with a plan for testing and/or repairing the well. Results of such testing and well repair shall be included in the annual monitoring report to the commissioner. Any mechanical downhole well repair performed on the well not previously reported shall also be included in the annual report.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2809 (December 2000).

§419. Logging and Testing Requirements

A. New Wells

- 1. Before operating a new well drilled for enhanced recovery injection or saltwater disposal, the casing outside the tubing shall be tested under the supervision of the Office of Conservation at a pressure not less than the maximum authorized injection pressure, or at a pressure of 300 psi, whichever is greater.
- 2.a. If open-hole logs of a nearby well were not run through the lowermost USDW, a new well shall be logged from the surface to the total depth before casing is set.
- b. If such logs exist for a nearby well, the new well need only be logged electrically below the surface casing before the long string is set.
- 3. After cementing the casing, a cement bond log, temperature survey, X-ray log, density log or some other acceptable test shall be run to assure there are no channels adjacent to the casing which will permit migration of fluids up the wellbore from the disposal formation to the lowermost USDW. The casing program shall be designed for the lifetime of the well.
- B. Converted Wells. Before operating an existing well newly converted to enhanced recovery injection or disposal, the casing outside the tubing shall be tested under supervision of the Office of Conservation at a pressure of 1,000 psi or maximum authorized injection pressure, whichever is less, provided no testing pressure shall be less than 300 psi.

C. Existing Wells

- 1. An injection well has mechanical integrity if:
- a. there is no significant leak in the casing, tubing or packer; and
- b. there is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection wellbore.

- 2. One of the following methods must be used to evaluate the absence of significant leaks under §419.C.1.a above:
 - a. monitoring of annulus pressure; or
 - b. pressure test with liquid; or
- c. records of monitoring showing the absence of significant changes in the relationship between injection pressure and injection flow rate for the following enhanced recovery wells:
- i. existing wells completed without a packer provided that a pressure test has been performed and the data is available and provided further that one pressure test shall be performed at a time when the well is shut down and if the running of such a test will not cause further loss of significant amounts of oil or gas; or
- ii. existing wells constructed without a longstring casing, but with surface casing which terminates at the base of the lowest USDW provided that local geological and hydrological features allow such construction and provided further that the annular space shall be visually inspected. For these wells, the commissioner shall prescribe a monitoring program which will verify the absence of significant fluid movement from the injection zone into a USDW.
- 3. One of the following methods must be used to determine the absence of significant fluid movement under §419.C.1.b above:
- a. cementing records demonstrating the presence of adequate cement to prevent such migration; or
 - b. the results of a temperature or noise log.
- 4. The commissioner may approve a request for the use of a test to demonstrate mechanical integrity other than those listed in §419.C.2 and 3 above, if the proposed test will reliably demonstrate the mechanical integrity for wells for which its use is proposed.
- 5. Each disposal and enhanced recovery well shall demonstrate mechanical integrity at least once every five years. The commissioner will prescribe a schedule and mail notification to operators to allow for orderly and timely compliance with this requirement.
- D. The operator shall notify the commissioner at least 48 hours prior to the testing. Testing shall not commence before the end of the 48-hour period unless authorized by the commissioner. The commissioner may authorize or require alternative tests or surveys as is deemed appropriate and necessary.
- E. A complete record of all mechanical integrity pressure tests shall be made out, verified and filed in duplicate on the Form PLT# 1 within 30 days after the testing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2810 (December 2000).

§421. Confinement of Fluids

A. If the operator or the commissioner determines that the disposal operation is causing fluid to enter an unauthorized stratum or to escape to the land surface, the operator shall shut-in the disposal well immediately and notify the commissioner by telephone within 24 hours at (225) 342-5515. Injection into the disposal well shall not be resumed until the commissioner has determined that the well is in compliance with all material permit conditions. If the certificate of compliance is not issued within 90 days, the permit shall be canceled and the disposal well shall be plugged and abandoned in accordance with §137.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30.4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2810 (December 2000).

§423. Plugging Requirements

A. Enhanced recovery injection wells and disposal wells shall be plugged in accordance with the provisions of the commissioner's rules governing the plugging of oil and gas wells, as found in §137.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2810 (December 2000).

§425 Liquid Hydrocarbon Storage Wells

- A. Authorization for the use of salt dome cavities for storage of liquid hydrocarbons is provided in Statewide Order No. 29-M.
- B. Authorization for all other liquid hydrocarbon storage wells will be granted by the commissioner after notice and hearing, provided there is a finding that the proposed operation will not endanger USDWs.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

§427. Filing Fee

A. A filing fee of \$100 shall be attached to each application for a saltwater disposal well or enhanced recovery project.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

§429. Annular Disposal

A. The commissioner may approve annular disposal of saltwater for a period of one year. The applicant shall provide the commissioner a radioactive tracer survey (accompanied by an interpretation of the survey by the company who performed the test) to prove that the injected

fluid is entering the correct zone and there are no leaks in the casing. The applicant shall furnish the commissioner an economic study of the well and the economics of alternative methods for disposal of the produced saltwater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

§431. Exceptions

A. The commissioner may grant an exception to any provision of this amendment upon proof of good cause. The operator must show proof that such an exception will not endanger USDWs.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

§433. Disposal of E&P Wastes by Slurry Fracture Injection

A. Applicability. The regulations in this Section shall apply to all onsite or offsite Class II injection wells which inject RCRA exempt E&P Waste at pressures which exceed the fracture pressure of the injection interval.

B. Definitions

Confining Zone—the impermeable geologic formation that is located below the base of the USDW and which directly overlies and is contiguous with the injection zone.

Containment Zone—the geologic formation or formations intended to serve as a barrier to fracture height growth, but allowed to be partially penetrated by fractures created during authorized injection. The containment zone directly overlies and is contiguous with the injection interval.

Injection Interval—the geological formation targeted to receive the injected fluids. This interval is contained within the injection zone.

Injection Zone—that group of geologic formations which extend from the bottom of the lowermost injection interval to the top of the containment zone.

Slurry Fracture Injection—a process by which solid waste is ground, if necessary, and mixed with water or another liquid. The resulting slurry is then deposited into fractures created in the receiving formation by the hydraulic force of injection.

Source Water Protection Area—the surface and subsurface area surrounding a source of drinking water (a water well, a well field, or a surface intake), supplying a public water system, through which contaminants are reasonably likely to move toward and reach the source of drinking water. The Source Water Protection Program is under the jurisdiction of the Louisiana Department of Health and Hospitals and the Louisiana Department of Environmental Quality.

Zone of Endangering Influence—a defined area around an injection well, the radius of which is the lateral distance for which the pressures in the injection interval(s) may cause the vertical migration of injection and/or formation fluid out of the injection zone.

- C. Application Requirements for Slurry Fracture Injection Wells
- 1. Each application for approval of a new slurry fracture injection well shall be filed on Form UIC-2 SFI (or latest revision) and shall be developed under the supervision of person(s) knowledgeable in all phases of slurry fracture injection permit application preparation. The original, signed by the operator, and one copy of the application with two complete sets of attachments shall be furnished to the commissioner.
- 2. The application for approval of a slurry fracture injection well shall be accompanied by:
 - a. a completed Form UIC-2 SFI (or latest revision);
 - b. a completed Form MD-10-R (or latest revision);
- c. a map showing the disposal well for which a permit is sought, the Area of Review (AOR), and the following information:
- i. the number or name and location of all existing producing wells, injection wells, abandoned wells, and dry holes within the AOR;
- ii. identification of the surface owner of the land on which disposal is to be located within the AOR;
- iii. identification of each operator with a producing leasehold within the AOR;
- iv. surface bodies of water, mines (surface and subsurface), quarries, water wells (public and private), public water systems, and other pertinent surface features including residences and roads;
 - d. a schematic of the well showing:
- i. the total depth, drilled out depth or plugged back depth of the well;
- ii. the depth of the top and bottom of the perforated interval;
- iii. the size of the casing, borehole and tubing, and the depth of the packer and bottom hole pressure sensor;
- iv. the depths of the tops and bottoms of the casings and the amounts, formulation, and yields of the cement slurries used to cement each string of casing;
 - v. the depth of the base of the USDW;
- vi. the depths of the tops and bottoms of the injection interval, the containment zone, the injection zone, and confining zone;
- e. if the well has been drilled, a copy of the Well History and Work Resume Report (WH-1) and an electric log of the well. In the case of undrilled wells, a descriptive statement of the proposed injection interval giving its approximate depth, along with an electric log or radioactivity log of a nearby well, if available;

- f. maps and cross sections that detail the local geology and hydrology. All maps shall be constructed on a 1:2000 scale and contain a legend and a north arrow. All control points and fault cuts shall be shown on all cross sections. At a minimum, the following maps and cross sections shall be submitted:
- i. isopach maps of the injection interval or intervals, the containment zones, and the confining zone;
- ii. a structure map of the top of the injection zone and confining zone;
- iii. two structural cross sections transecting the AOR and extending from below the base of the injection zone to above the base of the USDW. The cross sections shall be at approximate right angles and extend beyond the limits of the AOR;
- iv. a regional map contoured on the base of the USDW:
 - v. a map of all fault planes within the AOR;
- vi. any other information required by the commissioner;
- g. a tabulation of data on all wells that penetrate the proposed confining zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of plugging and/or completion, and any additional information the commissioner may require;
- h. a tabulation of all freshwater wells of record within the AOR. Each freshwater well shall be identified by owner, type of well, depth and current status of the well. Include a laboratory analysis for pH, chloride (mg/l) and total dissolved solids (mg/l) of a water sample from each freshwater well. A DEQ certified laboratory must perform the required analyses. As deemed appropriate, additional test parameters may be required by the commissioner;
- i. the following proposed operating data shall be submitted as part of the operator's application:
- i. the average and maximum daily rate and volume of slurry to be injected;
 - ii. the average and maximum injection pressure;
- iii. the proposed injection procedures (including storage and pre-injection treatment of the waste stream, and the well use schedule);
- j. schematic or other appropriate drawings of the surface (well head and related appurtenances) and subsurface construction details of the system;
- k. construction procedures including cementing and casing program, logging procedures, deviation checks, and a drilling, testing and coring program;
- 1. description of the bottom hole pressure sensor required in §433.G.4, which includes installation procedures and equipment specifications;
- m. detailed discussion of the logging and testing programs required in §433.H;

- n. a detailed description of the monitoring program proposed in order to meet the requirements of §433.I and if applicable, §433.E.4;
- o. contingency plans to cope with all shut-ins or well failures so as to prevent the migration of fluids out of the injection zone;
- p. for wells within the AOR (as defined in §433.D) which penetrate the proposed confining zone, but are not properly completed or plugged, the proposed corrective action to be taken under §433.F;
- q. any additional information necessary to demonstrate that injection into the proposed injection interval or intervals will not initiate fractures in the confining zone that could allow fluid movement out of the injection zone, pursuant to §433.B. Confining Zone.
- r. any other information required by the commissioner to evaluate the proposed well.
- 3. Unless the application is for a commercial slurry fracture injection well and subject to the public notice requirements of §519.A and §529, all applications for slurry fracture injection must be advertised at least once by the applicant in a format acceptable to the commissioner in the official state journal, in the official journal of the affected parish and in the journal of general circulation in the area where the proposed well is to be located, if different from the official parish journal. Interested parties shall have at least 15 days to provide comments and/or request a hearing.
- 4. Unless the application is for a commercial slurry fracture injection well and subject to the provisions for adequate closure in §519.C.14, all applications for slurry fracture injection wells shall contain a closure plan cost estimate in a format acceptable to the commissioner. If the well is permitted, the applicant shall provide a bond, letter of credit, certificates of deposit issued by and drawn on Louisiana banks, or any other evidence of equivalent financial security acceptable to the commissioner. The amount of financial security will be determined upon review of the closure cost estimate and will be reviewed annually.
- D. Area of Review (AOR). The AOR for each slurry fracture injection well shall be the greater of the two following methods:
- 1. calculation of the zone of endangering influence, which is that area the radius of which is the lateral distance for which the pressures in the injection interval(s) may cause vertical migration of the injection and/or formation fluid out of the injection zone. The zone of endangering influence shall be calculated using an acceptable model designed for this purpose; or
 - 2. a fixed radius of 2 miles from the injection well.
- E. Geologic Criteria of the Injection and Confining Zones
- 1. A confining zone which is impermeable and laterally continuous throughout the injection well's AOR shall immediately overlie the containment zone. The confining zone is to have a minimum thickness of 50 feet

- and be capable of preventing any upward fluid movement from the injection zone. Therefore, applicants/operators of SFI wells must provide information showing that injection into the injection zone will not initiate fracturing of the confining zone or the extension of existing fractures into the confining zone.
- 2. A containment zone may consist of either a single impermeable layer with a minimum thickness of 500 feet, or be comprised of alternating impermeable and permeable layers with a net thickness of impermeable strata of at least 500 feet.
- 3. The injection zone and confining zone shall be free of any fault planes or other geological discontinuities which could serve to transmit the injected waste out of the injection zone. The area is to be adequately mapped with sufficient controls and resolution to identify these geologic discontinuities.
- 4. If the AOR lacks adequate well control points to map the geologic features of the injection, containment, and confining zones, seismic surveys with acceptable interpretation shall be required encompassing an area inclusive of the AOR plus an additional one mile in order to acquire the necessary information needed to verify that injected waste will not migrate out of the injection zone. If seismic data is inadequate for this purpose, the commissioner shall require the operator to implement a suitable monitoring program capable of tracking the lateral and vertical extension of fractures caused by injection and to detect possible movement of fluids out of the containment zone. Such monitoring programs may incorporate the use of monitor wells, surface and subsurface tiltmeters, microseismic monitoring techniques, logging programs, or other technologies suitable for this purpose and which are acceptable to the commissioner.
- F. Corrective Action. Applicants shall identify all known wells within the injection well's AOR which penetrate the confining zone. For wells which are improperly sealed, completed, or abandoned, the applicant shall also submit a plan consisting of such steps or modifications as are necessary to prevent the movement of fluid out of the injection zone (corrective action). Where the plan is adequate, the commissioner shall incorporate it into the permit as a condition. Where the commissioner's review of an application indicates that the applicant's plan is inadequate, the commissioner shall require the applicant to revise the plan, prescribe a plan for corrective action as part of the permit, or deny the application. No owner or operator of a well may begin injection until all required corrective action has been taken.

G. Construction Requirements

1. Siting. All slurry fracture injection wells shall be sited in such a fashion that they inject into a formation which is beneath the lower most formation containing a USDW within a 2 mile radius of the well bore and meets the geologic criteria of the injection zone and confining zone prescribed in §433.E above. Location of a slurry fracture injection well so that its AOR extends into a Source Water Protection Area is prohibited.

- 2. Casing and Cementing. All slurry fracture injection wells shall be cased and cemented in accordance with the following criteria.
- a. The operator shall install casing necessary to withstand collapse, bursting, tensile, and other stresses and shall be cemented in a manner which will anchor and support the casing. Safety factors in casing program design shall be of sufficient magnitude to provide optimum well control while drilling and to assure safe operations for the life of the well. New pipe or used pipe reconditioned and tested to assure that it will meet or exceed American Petroleum Institute (API) standards for new pipe shall be used in all casing strings.
- b. Surface casing and long string casing strings shall be centralized by means of a sufficient number of centralizers spaced in a manner as to provide proper centralization of the casing string in the borehole prior to cementing.
- c. Surface casing shall be set a minimum of 100 feet below the base of the USDW and cemented to surface. Cemented to surface shall be considered in this Section as having actual cement returns noted at the surface. If cement returns are not observed, the operator shall contact the Injection and Mining Division and obtain approval for the procedures to be used to perform any required additional cementing operations.
- d. Cement shall be allowed to stand a minimum of 12 hours under pressure before initiating pressure test or drilling plug. Under pressure is complied with if one float valve is used or if pressure is held otherwise.
- e. A minimum of 12 hours prior notification shall be given to the appropriate Injection and Mining Division Conservation Enforcement Agent for the purpose of witnessing all required casing pressure tests. If the Conservation Enforcement Agent fails to appear within the 12-hour notification period, the operator may proceed with the pressure test and file an affidavit of casing test (Form Csg-T) with the Injection and Mining Division within 20 days of reaching total depth.
- f. Surface casing shall be tested at a surface pressure not less than the test pressure required in §109.B (or successor regulations). If at the end of 30 minutes the pressure gauge shows a drop in excess of 5 percent of test pressure, the operator shall be required to take such corrective measures as will ensure that such surface casing will hold said pressure for 30 minutes without a drop of more than 5 percent of the test pressure.
- g. Long string casing shall be set through the injection zone and cemented at least to the top of the confining zone.
- 3. All slurry fracture injection wells shall be equipped with injection tubing and a packer. The packer shall be set in the long string casing no higher than 150 feet above the perforated interval.

- 4. The well shall be equipped with a down-hole sensor that directly measures the fluid pressure at depth no higher than 50 feet above the packer setting depth. The pressure sensor must be connected to a device at the surface which will enable a continuous recording of the well's bottom hole pressure information in digital format.
- H. Logging and Testing Requirements. In addition to conformance with the logging and testing criteria contained in LAC 43:XIX.419.A or successor regulations, slurry fracture injection wells shall meet the following logging and testing requirements.
- 1. Open Hole Logging Requirements: A neutron/density porosity log of the injection and confining zone is required. An induction log shall be run to determine salinity levels. A spectral gamma ray log shall be run to determine baseline lithology of the subsurface prior to injection. All logs are to be run from surface to at least 50 feet below the injection zone.
- 2. Acoustic Logging Requirements: On a well that is to be completed with the intent for it to be used for slurry fracture injection, acoustic logs shall be required. An open hole acoustic log showing acoustic porosity and formation travel time shall be run from the surface to at least 50 feet below the injection zone. A synthetic seismogram is required to be submitted in order to predict fracture parameters and as a link to subsequent seismic interpretation (time based or four dimensional). VSP (Vertical Seismic Profiling) shall be run for lateral effect. Acoustic data may be run in various formats to identify reservoir and fracture parameters and to show containment of the waste stream within the containment and injection zones. The various formats may be surface-to-surface, well to surface, cross well, 2-dimensional, 3-dimensional and 4-dimensional data. All monitor wells shall be used for lateral offset of the VSP and the depth of investigation must match the dimensions of the disposal domain. Acoustic data must be obtained preinjection, during injection and post-injection (after disposal operations cease and prior to plugging and abandoning the well) in order to show long term containment.

3. Cement Bond Logging Requirements

- a. At the time of the initial completion, after long-string casing (to below the injection zone) has been set and cemented, a suitable, interpretable cement quality (bond) log shall be run. In an existing well, the tubing must be pulled and a suitable cement quality log run prior to permit approval. The log is to be run from surface to 50 feet below the base of the injection zone. The log must define both vertical and lateral cement quality.
- b. The log is to have sufficient vertical, horizontal and radial resolution to identify the location of cement channels, micro-channels, bonding index, gas cut cement, voids or any other cement/bond problem that may exist. The log must show transit time, amplitude, variable density and radial bond quality (from interpretation). Log quality control must show cement type, additives, setting time and compressive strength (used in variable density log generation), proper tool centering, proper casing centering

and sufficient cement sheath thickness, borehole fluids type, density, viscosity, pressure and temperature. In deviated wellbores, for adequate interpretation, effective tool centering must be seen. Matching casing size and weight must be correct on all interpretations. Where possible, the log must be correlated to shape and rugosity of the borehole (from open hole caliper and porosity/lithology logs). The log must also show line weight, line speed, casing collar locator and gamma ray for depth correlation.

- c. A repeat section, showing good repeatability, must be run from the base of the injection zone to the base of the confining zone. Wellsite and shop tool calibrations are to be included on all logs.
- 4. A temperature and gamma ray base log shall be run prior to the initiation of any fractures. Subsequent radioactive tracer or temperature logs are to be run using a method approved by the Injection and Mining Division.
- 5. The operator shall conduct a step rate/pressure falloff test on the injection well prior to the initiation of injection operations in order to establish the initial fracture closure and extension pressures of the injection interval.
- 6. A pressure falloff test shall be performed on the well prior to the initiation of any fracturing in order to establish the reservoir transmissivity. The Injection and Mining Division shall be consulted on the procedure for running this test.
- 7. An extended falloff shall be conducted at least once every 7-day cyclic injection period. The falloff period shall be maintained until the measured pressure has essentially stabilized.
- 8. The logging requirements for existing wells converted to slurry fracture injection are the same as those required for newly drilled wells.
- 9. Any other well logs or tests required by the commissioner.

I. Monitoring Requirements

- 1. A monitoring program that ensures that the injection activity does not cause the migration of fluids above the confining zone shall be approved by the commissioner. This monitoring program may be inclusive of or in addition to the monitoring program required in §433.E.4.
- 2. All approved monitoring programs shall include the continuous monitoring and recording of bottom hole pressures, injection rates, the tubing and casing annulus pressure, injected fluid density and the cumulative volume of waste injected using a method approved by the commissioner. The origination, type and components of all injected waste streams are to be recorded and made available when requested.
- 3. The operator shall analyze the bottom hole pressure data daily to ensure that the pressure in the injection interval is not becoming abnormally pressurized as a result of injection. Also, abnormal extrapolated pressures (net losses)

that cannot be associated with the injection volumes must be investigated immediately to ensure that fluids are not migrating out of the injection zone. Depending on the injected volumes, the formation pressure log must be history matched to predicted pressures.

- 4. Fracture height and length shall be evaluated by the operator on a minimum three month rotation, or as directed by the commissioner, utilizing a method approved by the commissioner.
- 5. The operator shall conduct periodic step-rate tests at least every three months. The commissioner may require more frequent step-rate tests in order to evaluate changes in formation parting pressures and in-situ stress conditions.
- 6. A cement bond log having the same presentation as the initial cement bond log shall be run annually to evaluate the effects of the previous years injection on the cement column. If it is evident that the cement bonding is losing integrity, injection will be prohibited until such time the integrity of the cement column is restored.

J. Operational Requirements

- 1. Based on the results of the step rate/pressure falloff test outlined in §433.H.5 above, the maximum and minimum injection pressures and corresponding injection rates will be determined. Using the fracture extension pressure derived from the step rate test, the minimum allowed bottom hole injection pressure shall be assigned a value of 150 psi below the extension pressure. The maximum allowed bottom hole injection pressure shall be no greater than 75 percent of the burst pressure of the casing.
- 2. The initial maximum authorized injection rate (at the start up of operations) shall be limited to no more than 20 percent over the rate required to maintain fracture extension pressure. However, if the operator can demonstrate conclusively that a higher injection rate will not cause excessive fracture growth, a higher injection rate may be authorized by the commissioner. If an increase in injection rate is authorized, the maximum and minimum bottom hole injection pressures shall be adjusted accordingly.
- 3. If at any time the bottom hole injection pressure or injection rate varies from the authorized range, the operator shall immediately cease injection and notify the Injection and Mining Division.
- 4. Should any of the periodic step rate/pressure fall off tests indicate a change in parting pressures or fracture extension pressures has occurred, the commissioner shall have to option to amend the well's minimum and maximum bottom hole injection pressures and maximum allowed injection rate or to require that the well cease injection until such time that the operator has proven that fluids are not migrating above the containment zone.
- 5. If monitoring indicates possible communication between the tubing and the tubing and casing annulus, the operator shall immediately cease injection and notify the Injection and Mining Division. Injection may not commence until the mechanical integrity of the well is restored and verified by the Injection and Mining Division.

- 6. Injection is to be conducted on a cyclic basis with the injection occurring only during daylight hours.
- 7. If in the commissioner's determination, overpressurization of the reservoir may cause the movement of fluid out of the injection zone, the commissioner shall suspend or revoke the well's permit to inject. Also, if the average reservoir pressure is subjected to any net decrease in pressure, the commissioner may suspend the well's permit until such threat is resolved.

K. Reporting Requirements

- 1. The operator shall maintain daily records for the following:
 - a. the bottom hole pressure at the start of injection;
 - b. the minimum and maximum injection pressures;
 - c. the injection rates at one hour intervals;
- d. the composition of injected waste stream (random sampling) on a daily or batch basis;
- e. the densities and viscosities of the waste stream at one hour intervals of injection;
- f. the minimum and maximum pressures on the casing and tubing annulus.
- 2. In addition, the operator shall provide an explanation for any discrepancies in the bottomhole or surface pressures, densities, viscosities and injection rates in a comments column. If an acceptable explanation for any discrepancy in this data is not provided, the commissioner may suspend the well's permit to inject until the operator provides this information.
- 3. This information, in addition to that required under §433.I.2 above, shall be maintained as a permanent record in the operator's files and shall be provided to the Injection and Mining Division upon request.
- 4. The operator shall provide to the Injection Mining Division weekly summary reports of:
- a. the minimum and maximum pressures recorded during injection;
- b. the minimum and maximum pressures recorded during falloffs;
- c. the minimum and maximum pressures on the casing and tubing annulus;
 - d. the daily and weekly injected volumes;
- e. the average density and viscosity of injected waste stream.
- 5. The operator shall provide the Injection and Mining Division each by no later than the third working day of each week the results of an analysis of all extended falloff periods occurring during the previous week's reporting period. Each analysis report shall include a log-log derivative plot of the falloff period with the different flow regimes identified thereon. A comprehensive analysis of the linear and radial flow regimes is required if present. A summary of the

- properties of the injected fluids used in the analysis and the injection rates observed during each injection period must be included in the report, in addition to any other information which may be pertinent to the results of the falloff analysis.
- 6. The operator shall provide a diskette or compact disk of the well's continuous bottom hole pressure and rate data for the reporting period in a format specified by the commissioner.
- 7. In addition, the operator shall provide an explanation for any discrepancies in the bottomhole or surface pressures, densities, viscosities and injection rates in a comments column of the report. If an acceptable explanation for any discrepancy in this data is not provided, the commissioner may suspend the well's permit to inject until the operator provides this information.
- 8. All records required in this Section shall be maintained by the operator for the life of the well and shall be made available for review or submitted to the Office of Conservation upon request.

L. Permitting Requirements

- 1. Applicants and applications for slurry fracture injection wells must comply with the applicable public notice requirements of this Chapter.
- 2. Applications for slurry fracture injection of E&P Waste shall comply with the following two-part permitting procedures:

a. Part I—Permit to Construct

- i. The initial application shall be reviewed for completeness, processed and upon meeting the permit requirements, a "Permit to Construct" shall be issued.
- ii. "Permit to Construct" shall become null and void one year from the date of issuance.
- iii. The commissioner may grant a one year extension from mitigating circumstances.

b. Part II—Permit to Inject

- i. Upon completion of construction, the documentation required by the "Permit to Construct" shall be submitted to the Office of Conservation.
- ii. If the submitted documentation indicates compliance with the "Permit to Construct" and that the well has been constructed as permitted and indicated in the application, a "Permit to Inject" shall be issued.
- 3. Slurry fracture injection wells permitted under the authority of this Section must comply with the applicable general requirements, public notice requirements, work permit requirements, legal permit conditions, permit transfer requirements, mechanical integrity pressure testing requirements, confinement of fluid requirements, and plugging and abandonment requirements of LAC 43:XIX.Chapter 4.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1921 (November 2001).

§441. Effect on Existing Special Orders

A. This order shall supersede §129 of Office of Conservation Statewide Order No. 29-B (effective November 1, 1967). Any existing special orders authorizing disposal of saltwater under conditions which do not meet the requirements hereof shall be superseded by this amendment and the operator shall obtain authority for such disposal after complying with the provisions hereof.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et}$ seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

§443. Applicability

A. All oil and gas and commercial facility operators shall be required to comply with applicable portions of this amendment within 90 days of the effective date, provided that all existing commercial facility operators shall be exempt from all permit application and public hearing requirements under §527 of this Order. Failure to comply with this requirement in a timely manner will subject an operator to the suspension or revocation of his permit and/or the imposition of penalties pursuant to R.S. 30:18.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000).

Chapter 5. Off-Site Storage, Treatment and/or Disposal of Exploration and Production Waste Generated from Drilling and Production of Oil and Gas Wells

NOTE: Onsite disposal requirements are listed in LAC 43:XIX, Chapter 3.

Editor's Note: Statewide Order 29-B was originally codified in LAC 43:XIX as §129. In December 2000, §129 was restructured into Chapters 3, 4 and 5. Chapter 3 contains the oilfield pit regulations. Chapter 4 contains the injection/disposal well regulations. Chapter 5 contains the commercial facility regulations. A cross-reference chart in the December 2000 *Louisiana Register*, page 2798, indicates the locations for the rules in each existing Section.

Editor's Note: Chapter 5 was amended in November 2001. A chart showing the restructuring of Chapter 5 is found on page 1898 of the *Louisiana Register*, November 2001.

§501. Definitions

Application Phase—an identifiable period of time during which E&P Waste receipts are applied to a land treatment cell.

Cell—an earthen area constructed with an underdrain system within a land treatment facility used for the placement, land treatment and degradation of E&P Waste at a commercial facility. (A *cell* as defined in this Section is not considered a pit.)

Closed System—a system in which E&P Waste is stored and treated in an enclosed sump, tank, barge, or other vessel/container or equipment prior to treatment and/or disposal. A closed system does not include an open top sump or earthen pit.

Commercial Facility—a legally permitted E&P Waste storage, treatment and/or disposal facility which receives, treats, reclaims, stores, and/or disposes of E&P Waste for a fee or other consideration. For purposes of this definition, Department of Environmental Quality (DEQ) permitted facilities, as defined by LAC 33:V and VII, which are authorized to receive E&P Waste, are not covered by this definition. However, such facilities must comply with the reporting requirements of §545.K herein if E&P Waste is accepted.

Commissioner—the Commissioner of Conservation of the State of Louisiana.

Community Saltwater Disposal Well or System—a saltwater disposal well within an oil or gas field which is operated by one operator of record for disposal of E&P Waste fluids and used by other operators of record in the same field or adjacent fields for noncommercial disposal of their produced water. Such operators share in the costs of operating the well/system. For purposes of this definition, adjacent fields means oil or gas fields or portions thereof which are located within or partially encroach upon the same township as a community saltwater disposal well or one or more townships all of which are directly contiguous to the township in which the community saltwater disposal well is located.

Container—a sump, storage tank, process vessel, truck, barge, or other receptacle used to store or transport E&P Waste.

Drilling Waste—oil-base and water-base drilling mud or other drilling fluids and cuttings generated during the drilling of wells. These wastes are a subset of E&P Waste.

E&P Waste—exploration and production waste.

Exploration and Production Waste (E&P Waste)—drilling wastes, salt water, and other wastes associated with the exploration, development, or production of crude oil or natural gas wells and which is not regulated by the provisions of, and, therefore, exempt from the Louisiana Hazardous Waste Regulations and the Federal Resource Conservation and Recovery Act, as amended. E&P Wastes include, but are not limited to the following.

Waste Type	E&P Waste Description			
01	Salt water (produced brine or produced water), except for			
01	salt water whose intended and actual use is in drilling.			
	workover or completion fluids or in enhanced mineral			
	recovery operations, process fluids generated by approved			
	salvage oil operators who only receive oil (BS&W) from			
	oil and gas leases, and nonhazardous natural gas plant			
	processing waste fluid which is or may be commingled			
	with produced formation water.			
02	Oil-base drilling wastes (mud, fluids and cuttings).			
03	Water-base drilling wastes (mud, fluids and cuttings).			
04	Completion, workover and stimulation fluids.			
05	Production pit sludges.			
06	Storage tank sludge from production operations, onsite and commercial saltwater disposal facilities, DNR			
	permitted salvage oil facilities (that only receive waste oil			
	[B, S, & W] from oil and gas leases), and sludges			
	generated by service company and commercial facility or			
	transfer station wash water systems.			
07	Produced oily sands and solids.			
08	Produced formation fresh water.			
09	Rainwater from firewalls, ring levees and pits at drilling			
10	and production facilities.			
10	Washout water and residual solids generated from the			
	cleaning of containers that transport E&P Waste and are			
	not contaminated by hazardous waste or material; washout water and solids (E&P Waste Type 10) is or may			
	be generated at a commercial facility or transfer station			
	by the cleaning of a container holding a residual amount			
	(no more than one barrel) of E&P Waste.			
11	Washout pit water and residual solids from oilfield related			
	carriers and service companies that are not permitted to			
	haul hazardous waste or material.			
12	Nonhazardous Natural gas plant processing waste solids.			
13	(Reserved).			
14	Pipeline test water which does not meet discharge			
	limitations established by the appropriate state agency, or			
	pipeline pigging waste, i.e., waste fluids/solids generated			
	from the cleaning of a pipeline.			
15	E&P Wastes that are transported from permitted			
	commercial facilities and transfer stations to permitted			
	commercial treatment and disposal facilities, except those			
16	E&P Wastes defined as Waste Types 01 and 06.			
16	Crude oil spill clean-up waste.			
50	Salvageable hydrocarbons bound for permitted salvage oil			
99	operators. Other E&P Waste not described above (shipment to a			
99	commercial facility or transfer station must be pre-			
	approved prior to transport).			
<u> </u>	approved prior to transport).			

Generator—any person or entity who generates or causes to be generated any E&P Waste.

Groundwater Aquifer—as defined in §301.

Inactive Cell—a land treatment cell which is not used for E&P Waste receipts or has been taken out of service by a land treatment facility. Such cell may be considered inactive only if it is a new cell which has not yet received E&P Waste or an existing cell which is in compliance with the applicable testing criteria of this Chapter.

Land Treatment—a dynamic process involving the controlled application of E&P Waste onto or into the aerobic surface soil horizon in open cells by a commercial land treatment facility, accompanied by continued monitoring and management, to alter the physical, chemical, and biological state of the E&P Waste. Site, soil, climate, and biological

activity interact as a system to degrade and immobilize E&P Waste constituents thereby rendering the area suitable for the support of vegetative growth and providing for beneficial future land use or to meet the reuse criteria of §565.

MPC—maximum permissible concentration.

Offsite—for purposes of this Section, outside the confines of a drilling unit for a specific well or group of wells, or in the absence of such a unit, outside the boundaries of a lease or contiguous property owned by the lessor upon which a well is drilled.

Oil-Based Drilling Muds—any oil-based drilling fluid composed of a water in oil (hydrocarbon or synthetic) emulsion, organophillic clays, drilled solids and additives for down-hole rheology and stability such as fluid loss control materials, thinners, weighting agents, etc.

Pit—an earthen surface impoundment constructed to retain E&P Waste, often referred to as a pond or lagoon. The term does not include lined sumps less than 660 gallons.

Residual—the de-minimis quantity of E&P Waste (solids or liquids) remaining in a container after offloading, using the practices commonly employed to remove materials from that type of container (e.g., pouring, pumping, and aspirating) and amounting to no more than one inch of residue remaining on the bottom, or no more than three percent by weight of the total capacity of the container if the container is less than or equal to 110 gallons in size, or no more than 0.3 percent by weight of the total capacity of the container if the container is greater than 110 gallons in size.

Reusable Material—a material that would otherwise be classified as E&P Waste, but which is capable of resource conservation and recovery and has been processed in whole or in part for reuse. To meet this definition, the material must have been treated physically, chemically, or biologically or otherwise processed so that the material is significantly changed (i.e., the new material is physically, chemically, or biologically distinct from the original material), and meets the criteria of §565.F.

Salt Cavern Waste Disposal Facility—any public, private, or commercial property, including surface and subsurface lands and appurtenances thereto, used for receiving, storing, and/or processing oil and gas exploration and production waste for disposal into a solution-mined salt cavern.

Salt Water—water with a chloride content greater than 500 ppm generated from a producing oil or gas well.

Sump—a container constructed of steel, fiberglass, sealed concrete, or some other impermeable material utilized for temporary storage of E&P Waste, including, but not limited to, wash water and solids (sludge) generated by the removal/cleaning of residual amounts of E&P Waste from storage containers.

Transfer Station—an E&P Waste receiving and storage facility, located offsite, but operated at an approved location in conjunction with a permitted commercial facility, which is used for temporary storage of manifested E&P Waste for a period of 30 days or less.

Transporter—a legally permitted carrier of E&P Waste contained in trucks, barges, boats, or other transportation vessels.

Treatment—as applied to Type A Facilities (defined herein), excluding Transfer Stations, treatment shall be defined as any method, technique, or process capable of changing the physical and/or chemical characterization or composition of E&P Waste so as to reclaim salvageable hydrocarbons, process reusable material, reduce waste volume (volume reduction), neutralize waste, reduce §549 criteria concentration(s) or otherwise render the waste more suitable for handling, storage, transportation, and/or disposal.

Treatment Phase—the period of time during which E&P Waste in a land treatment cell is physically manipulated and/or chemically altered (through the addition of chemical amendments, etc.) to bring the cell into compliance with the testing criteria or reuse criteria of LAC 43:XIX.549 and 565.

Treatment Zone—the soil profile in a land treatment cell that is located wholly above the saturated zone and within which degradation, transformation, or immobilization of E&P Waste constituents occurs. The treatment zone is subdivided as follows.

- 1. Waste Treatment Zone (WTZ)—the active E&P Waste treatment area consisting solely of the E&P Waste solids applied to a land treatment cell during the application phase, exists entirely above grade (original cell bottom), and whose actual depth depends on the solids content of the E&P Waste applied. For monitoring purposes the WTZ represents the 0-24" depth increment.
- 2. Upper Treatment Zone (UTZ)—the E&P Waste/native soil (original cell bottom) interface in a land treatment cell where some disturbance occurs as a result of E&P Waste treatment/manipulation. For monitoring purposes, the UTZ represents the 24-36" depth increment.
- 3. Lower Treatment Zone (LTZ)—the zone beneath the UTZ in a land treatment cell from approximately 36-54" (or to the top of the subsurface drainage system) which remains undisturbed throughout the life of a land treatment cell.
- Type A Facility—a commercial E&P Waste disposal facility within the state that utilizes technologies appropriate for the receipt, storage, treatment, or disposal of E&P Waste solids and fluids (liquids) for a fee or other consideration.
- Type B Facility—a commercial E&P Waste disposal facility within the state that utilizes underground injection technology for the receipt, storage, treatment, and disposal of only saltwater or other E&P Waste fluids (liquids) for a fee or other consideration.

Waste Management and Operations Plan—a plan as identified and required in §515.

Water-Based Drilling Muds—any water-based fluid composed of fresh water, naturally occurring clays, drilled solids and additives for fluid loss control, viscosity, thinning, pH control, weight control, etc., for down-hole rheology and stability.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2811 (December 2000), amended LR 27:1898 (November 2001), LR 29:937 (June 2003).

§503. General Requirements for Generators of E&P Waste

A. E&P Waste Characterization

- 1. Generators of E&P Waste must be familiar with the components of the E&P Waste they generate.
- 2. If not previously characterized, E&P Waste characterization procedures should be undertaken to determine the constituents of E&P Waste prior to disposal.
- 3. At a minimum, E&P Waste should be tested for the following constituents: pH, TPH, EC, TCLP benzene, SAR, ESP and the following metals: As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag and Zn.
- 4. E&P Waste should be re-characterized if the waste generation process changes significantly (e.g., process change, chemical additives, etc.).
- 5. E&P Waste which is to be taken offsite or has been taken offsite for storage, treatment, or disposal may be required to be sampled and analyzed in accordance with EPA protocols or Office of Conservation (OC) approved procedures.
- B. The unpermitted or unauthorized onsite or offsite storage, treatment, disposal or discharge of E&P Waste is prohibited and is a violation of these rules.
- C. Subsurface disposal of salt water is required and regulated by LAC 43:XIX.401 et seq. The requirements of this Chapter do not apply to either lease saltwater disposal wells or to community saltwater disposal wells.
- D. The generator is responsible for the proper handling and transportation of E&P Waste taken offsite for storage, treatment, or disposal to assure its proper delivery to an approved commercial facility or transfer station or other approved storage, treatment or disposal facility. Failure to properly transport and dispose of E&P Waste shall subject the generator to penalties provided for in R.S. 30:18. Each shipment must be documented as required by §545.
- E. At the option of the generator, E&P Waste may be treated and/or disposed at Department of Natural Resources (DNR) permitted commercial facilities and transfer stations under the provisions of this Chapter or Department of Environmental Quality (DEQ) permitted facilities as defined by LAC 33:V and VII which are permitted to receive E&P Waste which are subject to relevant DEQ regulations. If received, stored, treated and/or disposed at a DEQ regulated facility, E&P Waste would become the sole regulatory responsibility of DEQ upon receipt.

- F. Requirements for E&P Waste Type 06 (Storage Tank Sludge) and E&P Waste Type 12 (Gas Plant Waste Solids)
- 1. Generators of Waste Type 06 are hereby made aware that commercial land treatment facilities must manage such waste in compliance with the location criteria of §507.A.3 and the maximum permissible concentration (MPC) requirements of §549.C.7.c and d for total benzene.
- 2. Waste Types 12 is not required to be tested for benzene if disposed at commercial facilities that utilize treatment options other than land treatment (see §547).
- 3. Prior to shipment and disposal at commercial land treatment facilities, natural gas plant processing waste solids (gas plant waste—Waste Type 12) must be analyzed for the chemical compound benzene (C₆H₆). Testing must be performed by a DEQ certified laboratory in accordance with procedures presented in the *Laboratory Manual for the Analysis of E&P Waste* (Department of Natural Resources, August 9, 1988, or latest revision).
- 4. Subject to the requirements of §507.A.3 and §549.C.7.a, Waste Type 12 may be disposed at any commercial land treatment facility if test data indicates the waste is less than or equal to the MPC of 3198 mg/kg total benzene.
- 5. If test data indicates the concentration of total benzene in Waste Type 12 is above 3198 mg/kg (MPC criteria), the following disposal options are available:
- a. dispose of the waste at a permitted commercial facility that utilizes an E&P Waste treatment or disposal option other than land treatment;
- b. treat the waste (on-site) to a concentration of total benzene equal to or below 3198 mg/kg prior to off-site shipment to any commercial land treatment facility;
- c. dispose of the E&P Waste at a commercial land treatment facility that has been approved for the receipt, storage, treatment and disposal of E&P Waste that exceeds a total benzene concentration of 3198 mg/kg; or
- d. dispose of the E&P Waste at Department of Environmental Quality (DEQ) permitted facilities as defined by LAC 33:V and VII, pursuant to the provisions of §503.E above.
- 6. If a generator chooses to dispose of Waste Type 12 at a commercial land treatment facility, the generator must attach a copy of the laboratory report to the manifest which accompanies each shipment of the E&P Waste.
- 7. Commercial land treatment facilities may not receive, store, treat or dispose of E&P Waste Type 12, gas plant waste solids, unless the requirements of §505.B have been met.

G. Prohibition of Waste Mixing

1. A mixture of E&P Wastes containing amounts greater than residual quantities of Waste Type 06 (and associated wash water) shall be designated as Waste Type 06, and if land treated, must meet the distance requirements for Waste Type 06 in §507.A.3 below.

- 2. Mixing Waste Type 12 with any other E&P Waste type prior to sampling and shipment to a commercial land treatment facility or transfer station is strictly prohibited.
- 3. Any inadvertent or unavoidable mixture of E&P Wastes containing any quantity of Waste Type 12 (and associated wash water) must meet the MPC testing criteria of §549.C.7.a for total benzene and must meet the distance requirements for Waste Type 12 in §507.A.3.

H. General Reporting Requirements

- 1. Any spills which occur during the offsite transportation of E&P Waste shall be reported by phone to the Office of Conservation, within 24 hours of the spill and the appropriate state and federal agencies.
- 2. Operators (generators) are required to report the discovery of any unauthorized disposal of E&P Waste by transporters, or any other oilfield contracting company.
- 3. Within six months of the completion of the drilling or workover of any well permitted by the Office of Conservation, the operator (generator) shall comply with the reporting requirements of LAC 43:XIX.303 or successor regulations regarding the disposition of any E&P Wastes.

 $AUTHORITY\ NOTE: \quad Promulgated \ \ in \ \ accordance \ \ with \ \ R.S. \\ 30:4\ et\ seq.$

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2813 (December 2000), amended LR 27:1900 (November 2001), LR 29:937 (June 2003).

§505. General Requirements for Commercial Facilities and Transfer Stations

- A. The offsite storage, treatment, and/or disposal of E&P Waste by a commercial facility or transfer station must be approved by the commissioner as provided in this Chapter.
- B. Commercial land treatment facilities may not receive, store, treat or dispose of natural gas plant processing waste solids (Waste Type 12) that exceed the MPC criteria of §549.C.7.a for total benzene (3198 mg/kg) unless the company has demonstrated to the commissioner that Waste Type 12 can be pretreated to below the applicable MPC prior to land treatment. Such demonstration shall be considered a major modification of any existing permit and will require compliance with the permitting procedures of §§519, 527, and 529, including the submission of an application and public participation. The E&P waste management and operations plan required in §515 shall clearly indicate how the E&P Waste storage and treatment system will minimize the release of benzene (e.g., enclosed tanks, enclosed treatment equipment, vapor recovery systems, etc.). Such demonstration shall also include proof of solicitation from DEO regarding applicable required air permitting for the existing and amended land treatment system.
- C. Land treatment facilities that accept Waste Type 06 must meet the location criteria of §507.A.3 and the E&P Waste pretreatment and treatment criteria of §549.C.7.c and d

- D. Approval of Transfer Station Required: The construction and operation of a transfer station must be approved by the commissioner upon submission of a permit application according to the requirements of §521.
- E. The commissioner will consider and encourages the electronic submission of applications, data or reports required under this Chapter.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2813 (December 2000), amended LR 27:1901 (November 2001), LR 29:937 (June 2003).

§507. Location Criteria

- A. Commercial facilities and transfer stations may not be located in any area:
- 1. within 1/4 mile of a public water supply water well or within 1,000 feet of a private water supply well for facilities permitted after January 1, 2002;
- 2. where Type A and B facilities and transfer stations, Class II disposal wells, storage containers and E&P Waste treatment systems and related equipment are located within 500 feet of a residential, commercial, or public building, church, school or hospital;
- 3. where the perimeter of any Type A land treatment cell is located within restricted distances from a residential or public building, church, school, or hospital for treatment of Waste Types 06 and 12 as listed below:

Special Conditions	Restricted Distance
Land treatment of Waste Type 06:	
≤ 113 mg/kg total benzene (MPC)	1,000'
Not tested or > 113 mg/kg total benzene (MPC)	2,000'
Land treatment of Waste Type 12	
≤ 3198 mg/kg total benzene (MPC)	2,000'
> 3198 mg/kg total benzene (MPC)	(banned)
Land treatment of all other E&P Waste types	1,000'

- 4. where the subsurface geology of any proposed injection zone (reservoir) does not exhibit the following characteristics:
- a. adequate thickness and areal extent of the proposed injection zone; and
- b. adequate clay confining beds separating the top of the proposed injection zone and the base of the lowermost underground source of drinking water;
- 5. where permanent E&P Waste storage containers, land treatment cells, and storm water retention (sediment) ponds are located in a "V" or "A" zone as determined by flood hazard boundary or rate maps and other information published by the Federal Emergency Management Agency (FEMA) unless adequate levees are constructed to at least 1 foot above the 100-year flood elevation as certified by a professional engineer or surveyor and able to withstand the velocity of the 100-year flood. Existing facilities located in a "V" or "A" zone will be required to build facility levees

- above the 100-year flood elevation as certified by a professional engineer or land surveyor. As conditions change and new data is made available by FEMA, owners of existing commercial facilities and transfer stations will be required to update their facilities accordingly;
- 6. where such area, or any portion thereof, has been designated as wetlands by the U.S. Corps of Engineers during, or prior to, initial facility application review, unless the applicable wetland and DNR Coastal Management Division coastal use permits are obtained;
- 7. where other surface or subsurface conditions exist which in the determination of the Commissioner of Conservation would cause the location to pose a threat of substantial, adverse effects on public health or safety or the environment at or near the location.
- B. If the owner of the residence or commercial building or the administrative body responsible for the public building, hospital or church waives the distance requirements of §507.A.2 above, such waiver must be in writing, shall contain language acceptable to the commissioner, and shall be included in the permit application.
- C. Transfer stations are exempt from the location requirement of 500 feet from a commercial building.
- D. The above location criteria shall apply to commercial facilities in existence on November 20, 2001 and shall be applied to a proposed new facility or modification of an existing facility as of the date the notice of intent is published or the date the application is filed with the Office of Conservation, whichever is earlier.
- E. Any encroachment upon applicable location criteria after the date the notice of intent is published or the application is filed, whichever is earlier, shall not be considered a violation of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2817 (December 2000), amended LR 27:1901 (November 2001), LR 29:938 (June 2003).

§509. Design Criteria

- A. Commercial facilities, transfer stations and commercial Class II saltwater disposal wells shall be designed and constructed in such a manner as to prevent the movement of E&P Waste into soil, groundwater aquifers or underground sources of drinking water (USDWs) and to prevent the discharge of E&P Waste materials or E&P Waste byproducts into man-made or natural drainage or directly into state waters unless a discharge permit has been received from the appropriate state or federal agency.
- B. Commercial facilities and transfer stations shall be designed and constructed in a manner which is protective of public health, safety and welfare or the environment, surface waters, groundwater aquifers and underground sources of drinking water in accordance with, but not limited to, the following requirements:

- 1. all applicable construction and operational standards of this Chapter, as well as Chapter 2, Chapter 3, and Chapter 4 of LAC 43:XIX, Subpart 1, Statewide Order No. 29-B;
- 2. facility design shall provide for the segregation, separation, and containment of free oil, where appropriate;
- 3. retaining walls (levees) shall be built around all above-ground storage tanks to a level that will provide sufficient capacity to retain the contents of each tank and prevent the release of stored E&P Wastes due to tank leakage, or some other cause;
- 4. spill containment systems shall be built around unloading areas to prevent the escape of any E&P Wastes spilled during off-loading; and
- 5. limited access to E&P Waste transported on land shall be provided by a lockable gate system. The need for a 6-foot chain-link fence around an entire facility or any portion of a facility will be determined after a site investigation by the commissioner or his designated representative. Gates shall be locked except during the hours a facility is permitted to receive E&P Waste.
 - C. Land treatment cells shall not exceed 5 acres in size.
- D. Except for storm water retention (sediment) ponds at land treatment facilities (§549.C.12) and sumps as defined in §501, earthen or artificially lined pits shall not be constructed or used for storage of E&P Waste at any commercial facility or transfer station.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2817 (December 2000), amended LR 27:1902 (November 2001).

§511. Financial Responsibility

- A. Each permitted commercial facility and transfer station must maintain evidence of financial responsibility for any liability for damages which may be caused to any party by the escape or discharge of any material or E&P Waste offsite from the commercial facility or transfer station. Such evidence must be provided by the applicant prior to issuance of a permit.
- B. Financial responsibility may be evidenced by filing a letter of credit, bond, certificates of deposit issued by and drawn on Louisiana banks, or any other evidence of equivalent financial responsibility acceptable to the commissioner.
- C. In no event shall the amount and extent of such financial responsibility be less than the face amounts per occurrence and/or aggregate occurrences as set by the commissioner below:
- 1. \$500,000 minimum financial responsibility for any commercial facility (excluding transfer stations) which stores, treats or disposes of E&P Waste solids (i.e. oil- or water-base drilling fluids, etc.); or

- 2. \$250,000 minimum financial responsibility for a commercial salt water disposal facility which utilizes underground injection and a closed storage system; and
- 3. \$100,000 minimum financial responsibility for each transfer station operated in conjunction with a legally permitted commercial facility subject to the guidelines of this Section.

NOTE: The commissioner retains the right to increase the face amounts set forth above as needed in order to prevent waste and to protect public health, safety, and welfare or the environment.

- D. If insurance coverage is proposed and accepted to meet the financial responsibility requirement, it must be provided by an insurer that is licensed to transact the business of insurance, or eligible to provide insurance as an excess of surplus lines insurer, in one or more states, and is authorized to conduct insurance business in the state of Louisiana.
- 1. For a commercial facility which operates land treatment cells, such insurance must provide sudden and accidental pollution liability coverage as well as environmental impairment liability coverage.
- 2. For any commercial facility or transfer station which does not operate land treatment cells, such insurance must provide sudden and accidental pollution liability coverage.
- E. Proof of insurance must be provided by a certificate of liability insurance which must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted.

Commercial Facility Certificate of Liability Insurance

- 1. [Name of Insurer], (the "Insurer") of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under LAC 43:XIX.511. The coverage applies at [site code or address for each facility] for [insert "sudden and accidental pollution liability" or "environmental impairment"]. The limits of liability are [insert the dollar amount of "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number ________, issued on [date]. The effective date of said policy is [date].
- 2. The insurer further certifies the following with respect to the insurance described in LAC 43:XIX.511.E.1.
- a. Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligation under the policy.
- b. The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated.
- c. Whenever requested by the Commissioner of Conservation, the insurer agrees to furnish to the commissioner a signed duplicate original of the policy and all endorsements.

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- d. Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the commercial facility or transfer station, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Commissioner of Conservation.
- e. Any other termination of the insurance will be effective only upon written notice and only after the expiration of 30 days after a copy of such written notice is received by the Commissioner of Conservation.

I hereby certify that the wording of this instrument is identical to the wording specified in LAC 43:XIX.511.E as such regulation was constituted on the date this certificate was issued, as indicated below, and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess of surplus lines insurer, in one or more states, and is authorized to conduct insurance business in the state of Louisiana.

[Signature of authorized representative of Insurer]
[Type name]
[Title], Authorized Representative of [Name of Insurer]
[Address of Representative]
DATE OF ISSUANCE:

- F. A commercial facility or transfer station application shall contain documentation of the method by which proof of financial responsibility will be provided by the applicant. Where applicable, the application must include copies of a draft letter of credit, bond, or any other evidence of financial responsibility acceptable to the commissioner.
- G. Documentation of financial responsibility must be submitted to and approved by the commissioner prior to beginning construction.
- H. Financial responsibility must be renewable on April 1 of each year. Documentation that the required financial responsibility has been renewed must be received by March 15 of each year or procedures to initiate permit suspension will be initiated. If suspended, the permit shall remain suspended until insurance coverage has been confirmed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2819 (December 2000), amended LR 27:1902 (November 2001), LR 29:938 (June 2003).

§513. Provisions for Adequate Closure

- A. All offsite commercial facilities and transfer stations under the jurisdiction of the Office of Conservation shall be closed in a manner approved by the commissioner to insure protection of the public, the environment, groundwater aquifers and underground sources of drinking water. A plan for closure must be developed in accordance with the requirements of the commissioner.
- B. Each permitted commercial facility and transfer station shall maintain a bond or irrevocable letter of credit on file with the Office of Conservation to provide for adequate closure of the facility. The bond or letter of credit must be renewable on October 1 of each year.

- C. Closure bond or letter of credit amounts will be reviewed each year prior to the renewal date according to the following process.
- 1. A detailed cost estimate for adequate closure of each permitted commercial facility or transfer station shall be prepared by an independent professional consultant and submitted to the commissioner on or before February 1 of each year.
- 2. The closure plan and cost estimate must include provisions or closure acceptable to the commissioner and must be designed to reflect the costs to the Office of Conservation to complete the approved closure of the facility.
- 3. Upon review of the cost estimate, the commissioner may increase, decrease or allow the amount of the bond or letter of credit to remain the same.
- 4. Documentation that the required closure bond or letter of credit has been renewed must be received by September 15 of each year or the commissioner shall initiate procedures to take possession of the funds guaranteed by the bond or letter of credit and suspend or revoke the permit under which the facility is operated. Any permit suspension shall remain in effect until renewal is documented.
- D. The commissioner may consider the submission of other financial documents on a case-by-case basis to comply with the requirements of this Section.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2819 (December 2000), amended LR 27:1903 (November 2001).

§515. E&P Waste Management and Operations Plan

- A. All existing commercial facilities and transfer stations must maintain an E&P Waste management and operations plan (WMOP, Plan) on file with the Office of Conservation.
- B. The plan must be updated as necessary or at the request of the commissioner to take into consideration any changes or modifications made at the facility.
- C. The plan must describe the methods by which activities at the facility are monitored to insure compliance with the applicable requirements of this Chapter and Chapters 1, 3 and 4 of LAC 43:XIX, Subpart 1, Statewide Order No. 29-B.
- D. For existing commercial facilities and transfer stations, a WMOP shall be submitted to the Office of Conservation within 180 days of promulgation of this requirement.
- E. For new commercial facilities and transfer stations, a WMOP must be submitted with the application.
- F. At a minimum, a WMOP shall contain the following information:
- 1. volume, rate of application/treatment and types of E&P Wastes to be received, stored, treated and/or disposed at each commercial facility or transfer station; a complete explanation of procedures for witnessing the receipt,

sampling, and testing of E&P Wastes (E&P Waste acceptance policy) to assure that only permitted E&P Wastes are accepted, in compliance with the requirements of §545; and a detailed explanation of the storage, treatment and disposal system and related equipment to be utilized;

- 2. a contingency plan for reporting, responding to and cleaning up spills, leaks, and releases of E&P Wastes or treatment byproducts, including provisions for notifying applicable local, state and federal emergency response authorities and for taking operator-initiated emergency response actions;
- 3. a plan for routine inspection and maintenance of monitoring equipment (e.g., gauges, monitor wells, etc.) to ensure and demonstrate compliance with permit and regulatory requirements;
- 4. commercial land treatment facilities must provide the following information:
- a. a groundwater and facility monitoring plan to comply with the applicable requirements of this Chapter;
- b. specific plans for preventing or minimizing air emissions from sources such as the volatilization of organic materials (e.g., benzene) and/or hydrogen sulfide in E&P Waste, particulate matter (dust) carried by the wind, periodic removal and subsequent handling of free oil, and chemical reactions (e.g., production of hydrogen sulfide from sulfurbearing E&P Wastes);
- c. the plan shall address short-term and long-term distribution of Waste Type 06 on land treatment cells to prevent excessive 'same cell' loading of this E&P Waste Type;
 - d. a reuse stockpile management plan (see §565.G);
- e. plans to comply with the location criteria of §507.A.3 for land treatment of E&P Waste;
 - 5. a security plan for the facility;
- 6. a community relations or public information plan; and
- 7. an environmental, health, and safety plan which describes site sampling methods and procedures to determine the potential risks to public health, safety and welfare or the environment posed by the site. Such plan shall indicate how the facility will comply with the applicable environmental monitoring requirements of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2822 (December 2000), amended LR 27:1904 (November 2001).

§517. Permit Compliance Review

A. Commercial facility and transfer station permits shall be reviewed at least once every five years to determine compliance with applicable permit requirements and conditions. Commencement of the permit review process for each commercial facility and transfer station shall proceed as authorized by the Commissioner of Conservation.

- B. At the commissioner's discretion, any commercial facility or transfer station operator may be required to sample and test facility property and/or equipment for NORM and/or parameters established for "soils" in §549.E.2 to assure compliance with closure requirements of §567.A. The commercial facility or transfer station operator must submit a report detailing the results of all onsite sampling and testing in a manner acceptable to the Commissioner of Conservation. Sampling and testing must be performed by an independent professional consultant and third-party laboratory. Testing must be performed by a DEQ certified laboratory in accordance with procedures presented in the Laboratory Manual for the Analysis of E&P Waste (Department of Natural Resources, August 9, 1998, or latest revision).
- C. Upon review of the data and as deemed appropriate, administrative steps will be taken to revise or revoke permits.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2823 (December 2000), amended LR 27:1904 (November 2001).

§519. Permit Application Requirements for Commercial Facilities

A. Application and Permit Required

- 1. Every person who intends to construct and operate a new offsite commercial facility or transfer station, or make a major modification to an existing commercial facility or transfer station, shall file a permit application with the Office of Conservation.
- 2. A major modification to an existing commercial facility or transfer station permit is one in which the facility requests approval to make significant technological changes to an existing E&P Waste treatment and/or disposal system, including the construction and operation of additional equipment or systems to treat and/or dispose of E&P Waste streams other than those previously accepted by the facility. A major modification request may include a request to expand an existing commercial facility or transfer station onto adjacent property not previously permitted for E&P Waste disposal activities.
- 3. Examples of minor permit modifications include, but are not limited to, requests to add additional Class II disposal wells to an existing facility, to add treatment equipment to supplement existing equipment, or to add land treatment cells within previously permitted facility boundaries. Minor permit modifications shall be approved administratively.

B. Notice of Intent

- 1. At least 30 days prior to filing such application, the applicant shall publish a notice of intent to apply. Such notice shall contain sufficient information to identify the following:
 - a. name and address of the applicant;
 - b. the location of the proposed facility;

- c. the nature and content of the proposed E&P waste stream(s);
- d. the method(s) of storage, treatment, and/or disposal to be used.
- 2. The notice of intent shall be published in the official state journal, the official journal of the parish in which the proposed facility will be located, and in the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal.
- 3. Such notice shall be in bold-face type and not less than one-quarter page in size and shall be published on three separate days in each journal.
- C. General Information. Except for the filing and hearing fees, the following general information must be provided in duplicate in each application for approval to operate a commercial facility or transfer station:
- 1. for a commercial Class II injection/disposal well application, the appropriate nonrefundable application fee(s), in the amount(s) required by Statewide Order No. 29-R-00/01, LAC 43:XIX.701 et seq., or successor regulations. New operators must submit Form OR-1 (Organization Report) to receive a permanent Operator Code number (no fee required);
- 2. a nonrefundable hearing fee in the amount required by Statewide Order No. 29-R-00/01, LAC 43:XIX.701 et seq., or successor regulations;
- 3. a list of names, addresses, and telephone numbers of the principal officers of the company or corporation and the names and addresses of local governing authorities;
- 4. to document compliance with the location criteria of §507.A.2, provide a list of the names and addresses of all property owners, residents, off-set operators and industrial facilities within one quarter-mile of the proposed facility or disposal well. Include copies of waivers required by §507.B, where applicable. Include a map drawn to scale showing the following information:
- a. property boundaries of the commercial facility or transfer station;
- b. the boundaries and ownership of all land adjacent to the commercial facility or transfer station;
- c. the location and identification of all residential, commercial, or public buildings or hospitals within 1/4 mile of the facility property boundaries; and
- d. all public water supply wells and private water supply wells within 1 mile of the proposed facility;
- 5. a detailed schematic diagram of the proposed facility of sufficient scale to show the placement of access roads, buildings, and unloading areas, and the location and identification of all storage tanks, barges, and other containers (including design capacities), treatment system/equipment, levees, flowlines, filters, the Class II disposal well(s), and all other equipment and operational features of the storage, treatment and/or disposal system;

- 6. for operators proposing the construction and operation of a Class II disposal well, complete the appropriate application form, including all required attachments. To document compliance with the location criteria of §507.A.3, the application must provide strike and dip geologic cross sections intersecting at the location of the disposal well for which a permit is sought. These cross sections must include, at a minimum, available log control, geologic units, and lithology from the surface to the lower confining bed below the injection zone. The sections shall be on a scale sufficient to show the local geology in at least a two-mile radius from the proposed disposal well. The following information must be included on these cross-sections:
- a. the base of underground sources of drinking water (USDWs);
- b. the vertical and lateral limits of the proposed injection zone (reservoir);
- c. the vertical and lateral limits of the upper and lower confining beds; and
 - d. the location of faults or other geologic structures;
- 7. documentation of compliance with the applicable location criteria of §507.A.5 and 6, with regard to flood zones and wetland areas:
- 8. a copy of the title to the property upon which the facility will be located. If a lease, option to lease or other agreement is in effect on the property, a copy of this instrument shall be included in the application;
- 9. a parish map of sufficient scale to identify the location of the proposed facility;
- 10. a topographic map showing the location of the proposed site and any highways or roads that abut or traverse the site, all water courses, flood plains, water wells, and pipelines within one mile of the site boundary;
- 11. as required in §515, provide a detailed E&P Waste management and operations plan that includes, but is not limited to the proposed method of operation of the facility and procedures for the receipt, storage, treatment and/or disposal of E&P Wastes;
- 12. documentation that the facility and/or disposal well will comply with the applicable design criteria of §509;
- 13. evidence of financial responsibility for any liability for damages which may be caused to any party by the escape or discharge of any material or E&P Waste from the commercial facility or transfer station, in compliance with the requirements of §511. The application shall contain documentation of the method by which proof of financial responsibility will be provided by the applicant. Where applicable, include a copy of a draft letter of credit, bond, or any other evidence of financial responsibility acceptable to the commissioner. Prior to beginning construction, final (official) documentation of financial responsibility must be submitted to and approved by the commissioner;

- 14. documentation that a bond or irrevocable letter of credit will be provided for adequate closure of the facility, in compliance with the requirements of §513. The application must include the following:
- a. a detailed cost estimate for adequate closure of the proposed facility. The cost estimate must include a detailed description of proposed future closure procedures including, but not limited to plugging and abandonment of the disposal well(s) (if applicable), plugging of any monitor wells according to applicable state regulations, closing out any sumps, storm water retention (sediment) ponds, or land treatment cells, removing all surface equipment, and returning the environment (site) as close as possible to its original state. The closure plan and cost estimate must be prepared by an independent professional consultant, must include provisions for closure acceptable to the commissioner, and must be designed to reflect the costs to the commissioner to complete the approved closure of the facility;
- b. a draft irrevocable letter of credit or bond in favor of the state of Louisiana and in a form which includes wording acceptable to the commissioner. Upon completion of the application review process, the commissioner will set the amount of the required bond or irrevocable letter of credit. The bond or letter of credit must be renewable on October 1 of each year and must be submitted to and approved by the commissioner prior to beginning construction;
- 15. verification that a discharge permit has been obtained from the appropriate state or federal agencies or copies of any applications submitted to such agencies. If a facility does not intend to discharge treated E&P Waste water or other water, a completed and notarized Affidavit of No Discharge, which includes wording acceptable to the commissioner, must be provided;
- 16. a list of all other licenses and permits needed by the applicant to conduct the proposed commercial activities. Include identification number of applications for those permits or licenses or, if issued, the identification numbers of the permits or licenses;
- 17. provide the names of all companies currently or formerly owned and/or operated by the applicant (company requesting a permit) and/or the principal officers of the applicant for the receipt, storage, treatment, recycling and/or disposal of E&P Waste or hazardous or nonhazardous industrial or municipal solid waste;
- 18. provide a list of local, state and/or federal permits currently or formerly held by the applicant and/or any of the principal officers of the applicant for the storage, treatment, recycling and/or disposal of E&P Waste or hazardous or nonhazardous industrial or municipal solid waste;
- 19. for each permit included on the list required in §519.C.18 above, provide a list of all environmental regulatory violations, if any, cited by applicable local, state or federal regulatory agencies, including all resulting notices of violation, compliance orders, penalty assessments, or

- other enforcement actions and the current compliance status of each violation. Such list shall include all violations cited within the five years immediately preceding the date of application for a commercial facility or transfer station permit;
- 20. the names and addresses of the official journal of the parish in which the proposed facility will be located and the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal;
- 21. certification by an authorized representative of the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2823 (December 2000), amended LR 27:1905 (November 2001), LR 29:938 (June 2003).

§521. Permit Application Requirements for a Transfer Station

- A. The application for construction and operation of a transfer station by an existing Louisiana commercial facility permitted by the Office of Conservation shall include, but may not be limited to, the information required in §519.C.
- B. The application for construction and operation of a transfer station by the operator of an out-of-state, legally permitted commercial facility shall consist of the following:
- 1. compliance with the notice of intent requirements of $\S519.B$; and
 - 2. submission of the information required in §519.C.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2823 (December 2000), amended LR 27:1906 (November 2001).

§523. Permit Application Requirements for Land Treatment Systems

- A. In addition to the information requested in §519.C above, the information required in this Section must be provided in duplicate in each application for approval of a commercial facility incorporating the use of land treatment cells.
- B. A detailed description of the site considered for land treatment with relation to the following:
 - 1. past and present land use;
 - 2. geology/soil properties/hydrogeology;
 - 3. drainage and flood control;
 - 4. hydrologic balance; and
 - 5. highest seasonal groundwater level.

- C. A detailed description of the facility design including maps and drawings and a discussion of the following:
 - 1. site layout;
 - 2. proposed waste application technique;
 - drainage control;
 - 4. proposed waste loading rate; and
 - 5. expected facility life.
- D. An explanation of the proposed E&P Waste management and operations plan with reference to the following topics:
- 1. sampling and testing of incoming waste (waste acceptance procedures);
 - 2. method of receiving waste;
 - 3. waste segregation;
 - 4. application scheduling;
 - 5. waste-soil mixing;
- 6. proposed land treatment cell and groundwater monitoring plan;
 - 7. reuse stockpile management plan (see §565.G); and
- 8. an air emissions (odor) reduction and monitoring plan that addresses such sources as:
- a. the volatilization of organic materials and/or hydrogen sulfide in the E&P Waste;
 - b. particulate matter (dust) carried by the wind;
- c. periodic removal and subsequent handling of free oil; and
- d. chemical reactions (e.g., production of hydrogen sulfide from sulfur-bearing E&P Wastes).
- E. Detailed information concerning closure and postclosure activities and monitoring as follows:
 - 1. proposed closure procedures;
 - 2. post-closure maintenance; and
 - 3. closure and post-closure monitoring.
- F. Documentation of compliance with the location criteria of §507.A.4 and 5.
- G. Documentation that the land treatment facility operation requirements of §549 can be met.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2823 (December 2000), amended LR 27:1906 (November 2001), LR 29:938 (June 2003).

§525. Permit Application Requirements for Other Treatment and Disposal Options

- A. In addition to the information requested in §519.C, the following information required in this Section must be provided in duplicate in each application for approval of a commercial facility incorporating the use of treatment and/or disposal options other than land treatment and as defined in §547.
- B. A detailed description of the site with relation to the following:
 - 1. past and present land use;
 - 2. geology/soil properties/hydrogeology;
 - 3. drainage and flood control;
 - 4. hydrologic balance; and
 - 5. highest seasonal groundwater level.
- C. A detailed description of the facility design including maps and drawings and a discussion of the following:
 - 1. site layout;
 - 2. proposed waste application technique;
 - drainage control;
 - 4. proposed waste treatment rates; and
 - 5. expected facility life.
- D. An explanation of the proposed E&P Waste management and operations plan with reference to the following topics:
- 1. sampling and testing of incoming waste (waste acceptance procedures);
 - 2. method of receiving waste;
 - 3. waste segregation;
 - 4. proposed waste treatment monitoring plan;
 - 5. reuse stockpile management plan (see §565.G); and
- 6. air emissions (odor) reduction and monitoring plan that addresses such sources as:
- a. the volatilization of organic materials and/or hydrogen sulfide in the E&P Waste;
 - b. particulate matter (dust) carried by the wind;
- c. periodic removal and subsequent handling of free oil; and
- d. chemical reactions (e.g., production of hydrogen sulfide from sulfur-bearing E&P Wastes).
- E. Detailed information concerning closure and postclosure activities and monitoring as follows:
 - 1. proposed closure procedures;
 - 2. post-closure maintenance; and
 - 3. closure and post-closure monitoring.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1907 (November 2001), amended LR 29:938 (June 2003).

§527. Permitting Procedures

- A. The Office of Conservation will review a new commercial facility or transfer station application within 90 days of receipt and inform the applicant of its completeness.
- B. If the application is not complete, the applicant shall be advised of additional information to be submitted for approval or the application shall be returned and the applicant will be required to resubmit the application.
- C. Upon acceptance of the application as complete, the Office of Conservation shall set a time and date and secure a location for the required public hearing to be held in the affected parish.
- D. The public hearing shall be fact finding in nature and not subject to the procedural requirements of the Administrative Procedure Act. All interested persons shall be allowed the opportunity to present testimony, facts, or evidence related to the application or to ask questions.
- E. At least 30 days prior to the hearing, the applicant is required to file six copies of the complete application with the local governing authority of the parish in which the proposed facility is to be located to be made available for public review. Two additional copies of the complete application shall be filed in the parish library closest to the proposed facility.

F. Permit Issuance

- 1. The commissioner shall issue a final permit decision within 120 days of the close of the public comment period.
- 2. A final permit decision shall become effective on the date of issuance.
- 3. A permit to construct a commercial facility or transfer station (and any associated disposal well) will not be granted until a certified copy of a lease or proof of ownership of the property where the proposed facility is to be located is submitted to the Office of Conservation.
- 4. Approval or the granting of a permit to construct a commercial facility or transfer station (and any associated disposal well) shall be valid for a period of one year and if construction is not completed in that time, the permit shall be null and void. Requests for an extension of this one year requirement may be approved by the commissioner for extenuating circumstances only.
- G. The application for construction and operation of a new or additional transfer station by an existing commercial E&P Waste treatment and/or disposal facility permitted by the Office of Conservation to operate within the state of Louisiana shall be administratively approved or denied.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30.4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 26:2817 (December 2000), amended LR 27:1907 (November 2001).

§529. Public Notice Requirements

A. Permit Application Public Hearing Notice

- 1. Upon acceptance of the application as complete, the Office of Conservation shall publish in the next available issue of the *Louisiana Register*, a notice of the filing and the location, date and time of the public hearing to be held in the affected parish. Such public hearing shall not be less than 30 days from the date of notice in the *Louisiana Register*.
- 2. At least 30 days prior to the scheduled public hearing, the Office of Conservation shall publish a notice of the filing of the application and the location, date and time of the hearing in the official state journal.
- 3. The applicant shall publish a substantially similar notice in the official journal of the affected parish and in the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal, on three separate days at least 15 days prior to the date of the hearing. Such notice shall not be less than 1/4 page in size and printed in boldface type.
- B. Applications submitted on Form UIC-2 SWD (or latest revision) for a new commercial saltwater disposal well or Form UIC-32 (or latest revision) to recomplete a Class II commercial disposal well into a new disposal zone shall be advertised once in the legal ad section of the official state journal, in the official parish journal where the facility is located and in the journal of general circulation in the area where the facility is located, if different from the official parish journal. Such notice shall contain language acceptable to the commissioner and shall allow a 15 day comment period. At their own risk, companies may initiate workover activities prior to the end of the comment period. However, the well may not be utilized for injection until the public comment period has ended, the completion report has been submitted and approved and the well has been successfully tested for mechanical integrity.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et sea.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1908 (November 2001).

§531. Permitting Conditions

- A. The Office of Conservation may refuse to issue, reissue, or reinstate a commercial facility or transfer station permit or authorization to the following:
- 1. any individual, partnership or other entity which has been found to have violated any provision of LAC 43:XIX.Subpart 1 (Statewide Order No. 29-B) or has other violations which include, but is not limited to, failure to provide for proper closure of an oil, gas or injection well, commercial facility, transfer station and/or other oilfield site, failure to pay all fees, or failure to pay all civil penalties;

- 2. any individual, partnership, corporation or other entity for which a general partner, an owner of more than 25 percent ownership interest, a trustee, or other individual having direct or indirect control of the entity has held a position of ownership and/or control in another partnership, corporation or other entity which has been found to have violated any provision of LAC 43:XIX.Subpart 1 (Statewide Order No. 29-B) or has other violations which include, but is not limited to, failure to provide for proper closure of an oil, gas or injection well, commercial facility, transfer station and/or other oilfield site, failure to pay all fees, or failure to pay all civil penalties;
- 3. any individual, partnership, corporation or other entity for which a general partner, an owner of more than 25 percent ownership interest, a trustee, or other individual having direct or indirect control of the entity has held a position of ownership and/or control in another partnership, corporation or other entity which has been found, either contemporaneously with or discovered later, to have submitted false or intentionally misleading reports or responses to the orders of the Office of Conservation.
- B. The Office of Conservation may refuse to issue, reissue, or reinstate a commercial facility or transfer station permit or authorization to an individual or entity that has committed a violation of any provision of LAC 43:XIX.Subpart 1 (Statewide Order No. 29-B) or other violations which may subject it to the penalty set forth herein if any one of the following has occurred.
- 1. An order finding the violation has been entered against the individual or entity and all appeals have been exhausted or the individual or entity has failed to timely and appropriately request a hearing and the individual or entity is not in compliance or on a schedule for compliance with an order.
- 2. The Commissioner of Conservation and the individual or entity have entered into an agreed order relating to the alleged violation and the individual or entity is not in compliance or on a schedule of compliance with an order.
- C. The commissioner may deny an application for a commercial facility or transfer station based upon the regulatory compliance history of the applicant required in §519.C.17, 18 and 19.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation LR 27:1908 (November 2001).

§533. General Operational Requirements for Commercial Facilities and Transfer Stations

- A. Commercial facilities and transfer stations shall be operated in compliance with, but not limited to, the following.
- 1. The area within the confines of tank retaining walls (levees) shall be kept free of debris, trash, and accumulations of oil or other materials which may constitute a fire hazard.

- Portable gasoline powered engines and pumps must be supervised at all times of operation and stored at least 50' from tank battery firewalls when not in use. Vent lines must be installed on all E&P Waste storage tanks and must extend outside of tank battery firewalls.
- 2. The area within the confines of tank retaining walls (levees) must be kept free of accumulations of E&P Waste fluids and water. Such fluids shall be properly disposed of by injection into a Class II well or discharged in accordance with the conditions of a discharge permit granted by the appropriate state agency.
- 3. Tank retaining walls and land treatment cell levees shall be kept free of debris, trash, or overgrowth which would constitute a fire hazard or hamper or prevent adequate inspection.
- 4. Land treatment cell and associated surface drainage system surfaces shall at no time have an accumulation of oil of more than 1 inch at any surface location.
- 5. Land treatment cell levels shall be maintained with at least 2 feet of freeboard at all times.
- 6. Tank retaining walls (levees) must be constructed of soils which are placed and compacted in such a manner as to produce a barrier to horizontal movement of fluids. The levees must be properly tied into the barrier along the bottom and sides of the levees. All levees must be provided with a means to prevent erosion and other degradation.
- B. All facilities and systems for treatment, control, and monitoring (and related appurtenances) which are installed or used to achieve compliance with the conditions of a permit shall be properly operated and maintained at all times.
- C. Inspection and entry by Office of Conservation personnel shall be allowed as prescribed in R.S. 30:4.
- D. Discharges from land treatment cells, tanks, tank retaining walls and/or barges into man-made or natural drainage or directly into state waters will be allowed only after the necessary discharge permit has been obtained from the appropriate state and/or federal agencies and in accordance with the conditions of such permit.
- E. A sign shall be prepared, displayed and maintained at the entry of each permitted commercial facility or transfer station. Such sign shall utilize a minimum of 1-inch lettering to state the facility name, address, phone number, and site code shall be made applicable to the activities of each facility according to the following example.

"This E&P Waste (storage, treatment and/or disposal) facility has been approved for (temporary storage, treatment and/or disposal) of exploration and production waste only and is regulated by the Office of Conservation. Violations shall be reported to the Office of Conservation at (225) 342-5515."

F. A vertical aerial color photograph (or series of photographs) with stereoscopic coverage of each Type A land treatment facility must be obtained during the month of October every two years and provided to the Office of Conservation by November 30 of the year the photo is taken.

Such photograph(s) must be taken at an original photo scale of 1" = 1000' to 1" = 500' depending on the size of the facility. Photo(s) are to be provided as prints in either $8" \times 10"$ or $9" \times 9"$ formats. The commissioner may require more frequent aerial photos as deemed necessary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1909 (November 2001).

§535. Notification Requirements

A. Any change in the principal officers, management, or ownership of an approved commercial facility or transfer station must be reported to the commissioner in writing within 10 days of the change.

B. Transfer of Ownership

- 1. A commercial facility or transfer station permit may be transferred to a new owner or operator only upon approval by the commissioner. The new owner or operator must apply for and receive an operator code by submitting a completed Form OR-1 (or latest revision) to the Office of Conservation.
- 2. The current permittee shall submit an application for transfer at least 30 days before the proposed transfer date. The application shall contain the following:
- a. name and address of the proposed new owner (permittee);
 - b. date of proposed transfer; and
- c. a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, financial responsibility, and liability between them.
- 3. If no agreement described in §535.B.2.c above is provided, responsibility for compliance with the terms and conditions of the permit and liability for any violation will shift from the existing permittee to the new permittee on the date the transfer is approved.
- C. Commercial facility and transfer station operators shall give written notice to the commissioner of any planned physical or operational alterations or additions to a permitted facility or proposed changes in the E&P Waste management plan. Requests to make such changes must be submitted to and approved by the commissioner prior to beginning construction or accomplishing the change by other means.
- D. The operator of a newly approved commercial facility, transfer station, and/or disposal well must notify the commissioner when construction is complete. The operator shall not commence receiving E&P Waste or injecting E&P Waste fluids until the facility has been inspected for compliance with the conditions of the permit and the disposal well has been tested for mechanical integrity.
- E. An operator of a commercial facility or transfer station shall report to the commissioner any noncompliance, including but not limited to those which may endanger public health, safety or welfare or the environment,

including, but not limited to, impacts to surface waters, groundwater aquifers and underground sources of drinking water, whether onsite or offsite. Such notice shall be made orally within 24 hours of the noncompliance and followed by written notification within five days explaining details and proposed methods of corrective action.

- F. When a commercial facility or transfer station operator refuses to accept a load of unauthorized waste (not meeting the definition of E&P Waste), the Office of Conservation shall be notified immediately by electronic submission (facsimile) of a completed Form UIC-26 and the manifest which accompanied the shipment of unauthorized waste or otherwise provide the names of the generator and transporter of the unauthorized waste.
- G. The operator of a commercial salt cavern E&P Waste storage well and facility shall provide a corrective action plan to address any unauthorized escape, discharge or release of any material, fluids, or E&P Waste from the well or facility, or part thereof. The plan shall address the cause, delineate the extent, and determine the overall effects on the environment resulting from the escape, discharge or release. The Office of Conservation shall require the operator to formulate a plan to remediate the escaped, discharged or released material, fluids or E&P Waste if the material, fluids, or E&P Waste is thought to have entered or has the possibility of entering an underground source of drinking water.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1909 (November 2001), amended LR 29:938 (June 2003).

§537. Hours of Receiving

- A. Commercial facilities and transfer stations shall be adequately manned during hours of receiving and shall receive E&P Waste by truck only between the hours of 6 a.m. and 9 p.m., Central Time, except as provided in §537.B. below.
- B. The commissioner may grant approval for after hours (nighttime) receipt of E&P Waste by a commercial facility or transfer station (by truck) when an emergency condition exists which may endanger public health or safety or the environment and to minimize the potential for same. Generators shall be responsible for obtaining prior approval for nighttime disposal by calling the Office of Conservation at (225) 342-5515. When such approval has been granted, the Office of Conservation shall notify the commercial facility or transfer station which will receive the E&P Waste and may notice the state police.
- C. Commercial facilities and transfer stations with barge terminals may receive E&P Waste transported by barge on a 24-hour a day basis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1910 (November 2001), amended LR 31:2262 (September 2005).

§539. Monitoring Requirements for Commercial Class II Injection Wells

- A. Except during approved workover operations, a positive pressure of no less than 100 psi shall be maintained on the well annulus at all times. An injection volume recorder (tamper proof meter) must be installed and properly maintained on the injection line of each disposal well system. Injected volumes must be recorded monthly and the readings reported monthly on the Commercial Class II Daily Monitoring Log (Form UIC-21, or latest revision) and annually on the annual injection well report.
- B. Except during approved workover operations, wells shall be equipped with pressure gauges located on the wellhead, and situated so as to monitor the pressure of the injection stream and the pressure of the annular space between the casing and the injection string.
- C. The pressure gauges shall have half-inch fittings, be scaled in increments of not more than 10 psi, and be maintained in good working order at all times.
- D. A daily pressure monitoring log shall be maintained by the operator of the facility and shall contain, as a minimum, the following information:
 - 1. the date;
 - 2. the operator's name and address;
 - 3. the well name, number and serial number;
 - 4. the monitored injection pressure;
 - 5. the monitored annulus pressure;
- 6. whether or not the well was injecting at the time the pressures were recorded; and
- 7. the name or initials of the person logging the information.
- E. The pressure gauges shall be read and pressures recorded in the daily log.
- F. The daily log information shall be recorded on the appropriate form and submitted to the Office of Conservation within 15 days of the end of each month.
- G. Any discrepancies in the monitored pressures, which would indicate a lack of mechanical integrity and constitute noncompliance with applicable Sections of this Chapter, shall be reported orally to the Office of Conservation within 24 hours.
- H. The commissioner may require, on a case-by-case basis, the installation of a 24-hour chart recorder to monitor injection pressures, injection rates, annulus pressure and injected volumes.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1910 (November 2001).

§541. Sampling and Testing Requirements for Commercial Facilities with Monitor Wells

- A. At the discretion of or as determined by the commissioner, monitor wells may be required to be installed at any commercial facility or transfer station.
- B. Water samples from monitor wells shall be sampled by an independent professional consultant and analyzed by an independent testing laboratory. Samples shall be analyzed for pH, electrical conductivity (EC), chloride (C1), sodium (Na), total dissolved solids (TDS), total suspended solids (TSS), total petroleum hydrocarbons (TPH-ppm), total benzene, As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag, and Zn
- C. Water from newly constructed monitor wells on new commercial facilities shall be sampled and analyzed prior to receipt of E&P Waste by the facility to provide baseline data for the monitoring system. This data shall be submitted to the Office of Conservation to be made part of the facility's permanent file.
- D. Water from monitor wells on existing facilities shall be sampled and analyzed on a quarterly basis, with a copy of the analysis submitted to the Office of Conservation within 15 days of the end of each quarter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1910 (November 2001).

§543. Receipt, Sampling and Testing of Exploration and Production Waste

- A. Only E&P Waste (as defined in §501) from approved generators of record may be received at commercial facilities and transfer stations. Other generators of E&P Waste must receive written approval of the Office of Conservation in order to dispose of approved E&P Waste at a commercial facility or transfer station.
- B. For screening purposes and before offloading at a commercial facility or transfer station, each load of E&P Waste shall be sampled and analyzed (by facility personnel) for the following parameters:
 - 1. pH, electrical conductivity, chloride (Cl) content;
- 2. NORM, as required by applicable DEQ regulations and requirements.
- C. The commercial facility or transfer station operator shall enter the pH, electrical conductivity, and chloride (Cl) content on the manifest (Form UIC-28, or latest revision) which accompanies each load of E&P Waste.
- D. An 8-ounce sample (minimum) of each load must be collected and labeled with the date, operator and manifest number. Each sample shall be retained for a period of 30 days.
- E. Records of these tests performed pursuant to the requirements of this Section shall be kept on file at each facility for a period of three years and be available for review by the commissioner or his designated representative.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation LR 27:1911 (November 2001).

§545. Manifest System

- A. In order to adequately monitor the movement and disposal of E&P Waste, every shipment of E&P Waste transported to a commercial facility or transfer station shall be accompanied by a manifest entitled "E&P Waste Shipping Control Ticket." It is expressly forbidden to transport or accept E&P Waste without a properly completed manifest form.
- B. For companies who do not possess an Office of Conservation operator code number, Form UIC-23 (or latest revision) must be approved prior to transporting E&P Waste (including Waste Type 99) to a commercial facility or transfer station.
- C. For those generators who do possess an operator code number, authorization must be obtained prior to transporting Waste Type 99 to a commercial facility or transfer station.
- D. At the time of transport, the generator shall initiate the manifest by completing and signing Part I. After the transporter completes and signs Part II, the generator shall retain Generator Copy No. 1 (green) for his files. All other copies shall accompany the E&P Waste shipment.
- E. Upon delivery of the E&P Waste, the commercial facility or transfer station shall complete and sign Part III of the manifest. The transporter shall then retain the transporter's copy (pink) for his files.
- F. Upon completion of the manifest, the commercial facility or transfer station operator shall mail Generator Copy No. 2 to the generator.
- G. The original manifest for each load of E&P Waste received must be retained by the commercial facility or transfer station operator and stored in a secure and accurate filing system. In order to be available for review during site inspections, the manifests for the current months E&P Waste receipts and the prior months E&P Waste receipts must be maintained at the waste disposal facility (commercial facility or transfer station site) where the E&P Waste (and the manifest) was received (destination of the waste).
- H. Original manifests must be retained for a period of not less than three years in a manner acceptable to the Commissioner of Conservation and made available for review or submitted to the Office of Conservation upon request.
- I. The generator and transporter operator shall maintain file copies of completed manifests for a period of not less than three years.
- J. Oil and gas, commercial facility, and transfer station operators who transport E&P Waste out-of-state to a permitted disposal facility or receive E&P Waste from out-of-state must comply with the manifest system requirements of this Section.

K. A monthly report of E&P Waste receipts shall be completed by each commercial facility, transfer station or DEQ permitted facility as defined by LAC 33:V and VII (that receives E&P Waste) on Form UIC-19, or latest revision, and submitted to the Office of Conservation within 15 days of the end of each month.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et sea.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1911 (November 2001).

§547. Commercial Exploration and Production Waste Treatment and Disposal Options

- A. Commercial facilities and transfer stations may be permitted to conduct one or more of the following acceptable commercial E&P Waste treatment and disposal options.
- 1. Class II Injection Well. Produced salt water is required to be disposed by injection into a Class II well pursuant to the requirements of Chapter 4 of LAC 43:XIX. Other E&P Waste fluids may be injected into a Class II well upon approval of the Office of Conservation. Class II wells may be operated in conjunction with other treatment and disposal options. The requirements for permitting a Class II well are found in Chapter 4 of these regulations (LAC 43:XIX.401 et seq.).
- 2. Class II Well Slurry Fracture Injection. The process of mixing E&P Waste solids with fluids for subsurface injection. The solids/fluids mixture (slurry) is then pumped at or above fracture gradients into a suitably characterized subsurface reservoir. A series of fractures are created forming a sphere around the perforated interval. These fractures grow at different orientations around the wellbore and constitute the disposal domain. Slurry fracture injection can only be approved when appropriate regulations are adopted/promulgated.
- 3. Land Treatment. A dynamic process involving the controlled application of E&P Waste onto or into the aerobic surface soil horizon by a commercial facility, accompanied by continued monitoring and management, to alter the physical, chemical, and biological state of the E&P Waste. Site, soil, climate, and biological activity interact as a system to degrade and immobilize E&P Waste constituents thereby rendering the area suitable for the support of vegetative growth and providing for beneficial future land use or to meet the reuse criteria of §565. The requirements for permitting a land treatment system are found in §519.C and §523.
- 4. Phase Separation. The process of treating or pretreating oil and gas E&P Waste by physical and/or chemical methods which separate the fluid (water), solid, and oily fractions. Such process can be accomplished by any number of methods, including, but not limited to the use of a centrifuge, belt-press, flocculation, or other methods. The fractions are then further treated or disposed by other acceptable methods. Fluids generally are required to be disposed of into a Class II disposal well. Solids may be

further treated or disposed of by one of the options listed herewith. Oil may be sent to a salvage oil reclaimer or sold to a refiner. The equipment and processes utilized in phase separation of E&P Waste must be described in detail in the permit application.

- 5. Thermal Desorption. The process of heating E&P Waste in an enclosed chamber under either oxidizing or non-oxidizing atmospheres at sufficient temperature and residence time to vaporize organic contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust system. The equipment and processes utilized in thermal desorption of E&P Waste must be described in detail in the permit application. The criteria for treatment of E&P Waste by thermal desorption will be set on a case-by-case basis.
- 6. Cavern Disposal. The utilization of a solution-mined salt cavern for the disposal of E&P waste fluids and solids. Applicants for permits and operators of commercial E&P waste salt cavern disposal wells must comply with the requirements of this Chapter (LAC 43:XIX.501 et seq.) and the applicable requirements of Statewide Order No. 29-M-2, LAC 43:XVII, 3101 et seq. (see §555).
- 7. Incineration. The burning of organic E&P Waste materials. This treatment/disposal technique is used to destroy organic compounds with the reduction of the material to its mineral constituents. The equipment and processes utilized to incinerate E&P Waste must be described in detail in the permit application. The criteria for treatment of E&P Waste by incineration will be set on a case-by-case basis.
- 8. Solidification (Chemical Fixation). The addition of agents to convert liquid or semi-liquid E&P Waste to a solid before burial to reduce leaching of E&P Waste material and the possible migration of the E&P Waste or its constituents from the facility. The equipment and processes utilized to solidify E&P Waste must be described in detail in the permit application. The criteria for treatment of E&P Waste by solidification will be set on a case-by-case basis.
- 9. Stabilization (Chemical Fixation). An E&P Waste treatment process that decreases the mobility or solubility of E&P Waste constituents by means other than solidification. Examples of stabilization techniques include chemical precipitation or pH alteration to limit solubility and mixing of E&P Waste with sorbents such as fly ash to remove free liquids. The equipment and processes utilized to stabilize E&P Waste must be described in detail in the permit application. The criteria for treatment of E&P Waste by stabilization will be set on a case-by-case basis.
- B. The Office of Conservation will consider new and innovative treatment and/or disposal options on a case-by-case basis. The equipment and processes utilized by technologies other than those listed above to treat or dispose

- of E&P Waste must be described in detail in the permit application. The criteria for treatment of E&P Waste by other technologies will be set on a case-by-case basis.
- C. Produced water (Waste Type 01—saltwater) is subject to the disposal restrictions of §503.C.
- D. Waste Types 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 14, 15, 16, and 99 (and associated washwater) may be treated and disposed by land treatment methods in accordance with the buffer (location) requirements of §507.A.3.
- E. Waste Type 12 and wash water (Waste Type 10) generated in the cleaning of vessels containing Waste Type 12 may not be land treated unless the MPC requirements of §503.F and G and §549.C.7.a are met.
- F. All E&P Waste types may be treated or disposed by Class II slurry fracture injection, phase separation, thermal desorption, cavern disposal, incineration, solidification or stabilization methods.
- G. Transfer stations may receive all E&P Waste types without restriction.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1911 (November 2001), amended LR 29:938 (June 2003).

§549. Land Treatment Facility Requirements

- A. Land treatment facilities shall be isolated from contact with public, private, or livestock water supplies, both surface and underground.
- B. The siting, design, construction, operation, testing and closure of land treatment facilities shall be approved only after an application is submitted to and approved by the commissioner pursuant to the requirements of §519, §527, and §531.

C. General Requirements

- 1. The soil shall contain a slowly permeable horizon no less than 12 inches thick containing enough fine grained material within 3 feet of the surface to classify it as CL, OL, MH, CH, or OH under the Unified Soil Classification System.
- 2. The seasonal high water table shall be maintained throughout the facility's operational life at least 36" below the soil surface, either as a result of natural or artificial drainage.
- 3. Throughout the operational life of a land treatment cell, in order to end the treatment phase and re-enter the application phase, a cell must be shown to comply with the following criteria.

Parameter	Limitation
PH	6.5 - 9
EC	10 mmhos/cm
SAR	12
ESP	15 percent
ТРН	3 percent (by weight)
Metals (ppm)	
Arsenic	40
Total Barium	100,000
Cadmium	10
Chromium	1,000
Copper	1,500
Lead	300
Molybdenum	18
Nickel	420
Mercury	10
Selenium	10
Silver	200
Zinc	500

- 4. The concentration of measured constituents in any groundwater aquifer shall at no time significantly exceed background water quality data.
- 5. Fluids collected in a land treatment cell underdrain system shall be monitored to provide early warning of possible migration of mobile E&P Waste constituents. The monitoring program shall be defined in the permit application or the facility E&P Waste management and operations plan.
- 6. An independent professional consultant and laboratory shall perform the necessary monitoring to assure adherence to the requirements of this Section.

7. E&P Waste Pretreatment and Treatment

- a. Waste Type 12 which contains a concentration of total benzene equal to or less than 3198 mg/kg total benzene (MPC) may be placed on land treatment cells without pretreatment. However, in treating such E&P Waste, the commercial land treatment facility must meet the location criteria of §507.A.3.
- b. Land treatment facilities which have been approved to receive Waste Type 12 which contain more than 3198 mg/kg total benzene must pretreat the E&P Waste to a concentration less than or equal to 3198 mg/kg total benzene (MPC) before placing the E&P Waste on a land treatment cell (see §505.B).
- c. Waste Type 06 which has been tested and found to contain a total benzene concentration less than or equal to 113 mg/kg (MPC) may be land treated no closer than 1,000' from a residential or public building, church, school, or hospital.
- d. Waste Type 06 which has not been tested or tested and found to contain a total benzene concentration greater than 113 mg/kg (MPC) must be land treated no closer than 2,000' from a residential or public building, church, school, or hospital.
- e. Free/visible oil must be removed from all E&P Waste prior to loading on a land treatment cell.

f. Produced saltwater and gas plant waste fluids, must not be disposed of by land treatment. If pretreated prior to disposal (e.g., filtered or otherwise phase separated) fluids must be injected into a Class II well.

8. Application Phase

- a. E&P Waste may be applied to active land treatment cells during the application phase only. An application phase begins only under the following conditions:
- i. a new constructed and approved cell begins receipt of E&P Waste;
- ii. a cell containing treated E&P Waste has been shown to meet the testing criteria of §549.C and is utilized for the application of new E&P Waste receipts;
- iii. a cell from which treated E&P Waste has been removed (after meeting the reuse testing criteria of §565) is utilized for the application of new E&P Waste receipts.
- b. An application phase ends when either one of the following occurs:
- i. three months have elapsed since the date application first began, unless an exception is granted upon proof of good cause under the provisions of §569; or
- ii. 15,000 bbls/acre of E&P Waste has been applied to a cell.
- c. In order to document the amount of E&P Waste applied to each land treatment cell, commercial facilities are required to:
- i. indicate on each manifest (E&P Waste shipping control ticket) the number of the cell onto which each load of E&P Waste is applied;
- ii. maintain a daily or weekly log of type and volume of E&P Wastes applied to each land treatment cell and the activities undertaken to bring each cell into compliance; and
- iii. include in the quarterly report the amount of each type of E&P Waste applied to each cell and the activities undertaken to bring each cell into compliance during the quarter.
- 9. Treatment Phase. Upon completion of the application phase, land treatment cells enter the treatment phase. Remedial action (treatment) must be actively performed in order to bring a cell into compliance with this Section. Cells must reach compliance status within 24 months of the end of the application phase.
- 10. Land treatment cell levees must be constructed of soils which are placed and compacted in such a manner as to produce a barrier to horizontal movement of fluids. Levee construction material shall be compacted in a maximum of 8" lifts to > 90 percent standard proctor test. The levees must be properly tied into the barrier along the bottom and sides of the cells. Actual construction of the levees must be monitored and documented by professional engineering or geotechnical soil testing company. All levees must be provided with a means to prevent erosion and other degradation.

- 11. Rainwater and other E&P Waste fluids are not to be stored on land treatment cells. Such fluids are to be removed from cells in a timely manner and stored in appropriate facilities. Such fluids may only be used for removal of salts during the treatment phase. Otherwise, cells must remain free of excessive fluids.
- 12. Storm water retention (sediment) ponds constructed after January 1, 2002 must be constructed in compliance with the liner requirements for produced water pits in LAC 43:XIX.307.A and the land treatment levee requirements of §549.C.10 above. Such ponds must not have an accumulation of oil at any surface location.

D. Monitoring Requirements

NOTE: References for the parameters required in this Section are listed as follows.

EC—electrical conductivity (millimhos/cm for soil,

micromhos/cm for water)

SAR—sodium adsorption ratio

ESP—exchangeable sodium percentage (percent)

CEC—cation exchange capacity (milliequivalents/100 gm soil)

TPH—total petroleum hydrocarbons (ppm)

Total benzene (ppm)

TCLP benzene (Toxicity Characteristic Leaching

Procedure—ppm)

Total metals as follows:

As-arsenic

Ba—barium

Cd-cadmium

Cr—chromium

Cu—copper

Pb—lead

Hg—mercury

Mo—molybdenum

Ni—nickel

Se-selenium

Ag—silver Zn—zinc

TDS—total dissolved solids

TSS—total suspended solids

Soluble cations:

Na-sodium

Ca—calcium

Mg—magnesium

Soluble anions:

CO₃—carbonate

HCO₃—bicarbonate

C1—chloride

SO₄—sulfate

- 1. Prior to the receipt of E&P Waste in a newly permitted and constructed land treatment system or cell, baseline data must be provided by the following sampling and testing program.
- a. Soil in the treatment zone (0-24") of each cell must be sampled and tested for the following parameters: pH, EC, SAR, ESP, CEC, TPH, As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag, and Zn.
- b. Groundwater must be sampled and tested for the following parameters: pH, EC, TDS, TSS, TPH, C1, Total Benzene, Na, As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag, and Zn.
- c. Water from land treatment cell underdrain systems must be sampled and tested for the following

parameters: TDS, pH, Na, Cl, EC, TPH, total benzene, Ba, Pb, Zn, and reactive sulfides.

- 2. The following monitoring program must be conducted during the active life of a permitted E&P Waste land treatment system.
- a. Soil in the treatment zone (waste treatment zone—WTZ and upper treatment zone—UTZ) must be sampled and tested quarterly to determine E&P Waste degradation and accumulation of metals and hydrocarbons. Samples must be analyzed for the following: As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag, Zn, and TPH.
- b. Soil in the treatment zone (waste treatment zone—WTZ and upper treatment zone—UTZ) must be sampled and tested quarterly to determine the accumulation of salts and to provide data for determining necessary soil amendments. Samples must be analyzed for the following: pH, EC, SAR, ESP, CEC, soluble cations (Na, Ca, Mg), and soluble anions (CO₃, HCO₃, C1, SO₄).
- c. Discharge Water. A copy of each discharge monitoring report made in conformance with any applicable state and/or federal regulatory program shall be furnished to the Office of Conservation on a timely basis.
- d. Land treatment cell underdrain systems must be sampled and tested quarterly to determine the presence of mobile constituents. Sampling and testing shall be performed on a quarterly basis. A composite of at least three samples per management unit (or cell if applicable) are to be analyzed for the following: TDS, pH, Na, Cl, EC, TPH, total benzene, Ba, Pb, Zn and reactive sulfides. If total benzene exceeds an action level of 0.5 ppm, the commissioner may require further assessment and testing as deemed appropriate.
- e. Groundwater levels in monitor wells shall be measured monthly for a period of two years to determine seasonal fluctuation in water table. Water level shall be measured quarterly each year thereafter.
- f. Groundwater from monitor wells shall be sampled quarterly to determine the impact of facility operation on groundwater. Prior to obtaining discreet representative samples, each well must be purged in accordance with EPA guidance. A composite of at least two samples per well shall be tested for the following parameters: TDS, TSS, pH, C1, Na, EC, TPH, total benzene, As, Ba, Cr, Pb, and Zn.
- g. Quarterly monitoring reports must be submitted to the Office of Conservation according to the following schedule: 1st Quarter—due March 31; 2nd Quarter—due June 30; 3rd Quarter—due September 30; 4th Quarter—due December 31. Each quarterly report must contain the following information:
- i. the status of each cell at the time of the sampling event (application phase, treatment phase, inactive, etc.), the date(s) sampling took place, and a diagram indicating sample locations for each cell;

- ii. the amounts and types of E&P Waste applied to each cell during the application phase, including the beginning and ending dates of application;
- iii. a brief description of treatment activities undertaken to bring each cell into compliance with the criteria of this Section, including the status of fluids (salts) removal from each cell;
- iv. a compilation (chart) of test results for the present and past three quarterly sampling events;
 - v. copies of current laboratory test data;
 - vi. the size of each land treatment cell (in acres);
- vii. a compilation (chart) of water depth measurements of monitor well water levels calculated from the top of casing;
- viii. a potentiometric surface map contoured with water level elevations from mean sea level.
- h. The Office of Conservation may approve an alternative monitoring program upon receipt of evidence that such procedure shall provide adequate monitoring during the active life of a facility.

3. Sampling and Testing Requirements

- a. A stratified random sampling system shall be used to determine soil sampling locations in land treatment cells. All cells and monitor wells are to be sampled and tested for all parameters unless otherwise approved by the commissioner. Facilities are required to notify the Office of Conservation at least one week in advance of each quarterly sampling event in order for a representative of this office to be present.
- b. Soil samples in land treatment cells shall be taken in the waste treatment zone (WTZ) and the upper treatment zone (UTZ). Over time, the depth of the treatment zone sampled may need to be increased due to solids buildup on land treatment cells. The degree of E&P Waste incorporation shall be noted at the time of sampling.
- c. At least two samples must be taken from WTZ and UTZ for each acre of cell area.
- d. Soil samples are to be analyzed using standard soil testing procedures as presented in the Laboratory Manual for the Analysis of E&P Waste (Department of Natural Resources, August 9, 1988, or latest revision).
- e. Water samples are to be analyzed for required parameters according to acceptable EPA guidelines and/or the laboratory procedures as presented in the Laboratory Manual for the Analysis of E&P Waste (Department of Natural Resources, August 9, 1988, or latest revision).
- f. The soil in an inactive cell may not be required to be tested for certain quarterly monitoring parameters only after two consecutive quarterly tests indicate compliance and upon receipt of written approval of this office.

E. Closure and Post-Closure Monitoring

- 1. Operators of land treatment systems shall submit closure and post-closure maintenance and monitoring programs to the Office of Conservation for approval. The monitoring program shall address sampling and testing schedules for soil in the treatment zone, water collected from the unsaturated zone monitoring system, surface runoff water, and groundwater.
- 2. Sampling and testing must be performed during the entire closure and post-closure periods. To certify closure of a land treatment system, water collected from the unsaturated zone monitoring system and groundwater must meet background water quality values; in addition, soils in the treatment zone and surface runoff water must meet the following criteria.

Parameter	Criteria	No. of Consecutive Samples			
Soils in the Treatment Zone					
PH	6.5-9	2			
TPH	\leq 3.0 percent	2			
EC	≤ 10 mmhos/cm	2			
TCLP Benzene	≤ 0.5 ppm	2			
SAR	<u>≤</u> 12	2			
ESP	≤ 15 percent	2			
Metals (ppm)					
As	<u>≤</u> 10	2			
Ba	≤ 100,000	2			
Cd	<u>≤</u> 10	2			
Cr	≤ 1000	2			
Cu	≤ 1,500	2			
Pb	≤ 1000	2			
Hg	≤ 10	2			
Mo	≤ 18	2			
Ni	< 420	2			
Se	≤ 10	2			
Ag	≤ 200	2			
Zn	≤ 500	2			
	Runoff Water				
PH	6.5-9.0	4			
TPH	≤ 15 ppm	4			
TCLP Benzene	≤ 0.5ppm	4			
EC	≤ 2.0 mmhos/cm	4			
SAR	≤ 10	4			
TSS	≤ 60 ppm	4			
Chloride	500 ppm	4			
Metals (ppm)					
As	≤ 0.2	4			
Ba	<u>≤</u> 10	4			
Cd	≤ 0.05	4			
Cr	<u>≤</u> 0.15	4			
Cu	≤ 1.3	4			
Нд	<u>≤</u> 0.01	4			
Pb	≤ 0.10	4			
Se	<u>≤</u> 0.05	4			
Zn	≤ 1.0	4			

3. Post-closure monitoring shall be performed on intervals of six months, one, two and five years following certification that closure is complete.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et seq}$.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation LR 27:1912 (November 2001).

- §551. Requirements for Phase Separation (Reserved)
- §553. Requirements for Thermal Desorption (Reserved)

§555. Requirements for Cavern Disposal

- A. Applicants for new commercial solution-mined salt cavern facilities to receive and dispose of E&P Waste and operators of such existing facilities must comply with the administrative and technical criteria of LAC 43:XIX, Subpart 1, Chapter 5 (§501 et seq.) as well as the applicable definitions, administrative criteria and technical criteria of LAC 43:XVII, Subpart 4, Chapter 31 (§3101 et seq., Disposal of Exploration and Production Waste in Solution-Mined Salt Caverns).
- B. The application for a new commercial salt cavern for the disposal of E&P Waste shall include, but may not limited to the following information:
 - 1. the general provisions of LAC 43:XVII.3103;
- 2. an application shall contain the information required in LAC 43:XVII.3107, as follows:
 - a. §3107.B—Administrative Information;
 - b. §3107.C—Maps and Related Information;
 - c. §3107.D—Area of Review;
 - d. §3107.E—Technical Information;
- 3. the legal permit conditions required in LAC 43:XVII.3109, as follows:
 - a. §3109.A—Signatories;
 - b. §3109.C—Duty to Comply;
 - c. §3109.D—Duty to Halt or Reduce Activity;
 - d. §3109.E—Duty to Mitigate;
 - e. §3109.F—Proper Operation and Maintenance;
 - f. §3109.G—Inspection and Entry;
- g. §3109.H. 3, 4, 7b, 8, 9 and 10—Notification Requirements;
 - h. §3109.I—Duration of Permits;
 - i. §3109.J—Compliance Review;
 - j. §3109.K—Additional Conditions;
- 4. the location criteria of Statewide Order No. 29-M-2, LAC 43:XVII.3113;
- 5. the site assessment requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3115;
- 6. the cavern and surface facility design requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3117;
- 7. the well construction and completion requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3119;

- 8. the operating requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3121;
- 9. the safety requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3123;
- 10. the monitoring requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3125;
- 11. the pre-operating and completion report requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3127;
- 12. the well and salt cavern mechanical integrity pressure and leak test requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3129;
- 13. the requirements for determining cavern configuration and measuring cavern capacity in Statewide Order No. 29-M-2, LAC 43:XVII.3131;
- 14. the limits on cavern capacity in Statewide Order No. 29-M-2, LAC 43:XVII.3133;
- 15. the requirements for inactive caverns in Statewide Order No. 29-M-2, LAC 43:XVII.3135;
- 16. the monthly reporting requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3137;
- 17. the record retention requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3139;
- 18. the applicable closure and post-closure requirements of Statewide Order No. 29-M-2, LAC 43:XVII.3141.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et sea

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 29:938 (June 2003).

- §557. Requirements for Incineration (Reserved)
- §559. Requirements for Solidification/Stabilization (Reserved)
- §565. Resource Conservation and Recovery of Exploration and Production Waste
- A. In order to encourage the conservation and recovery of resources in the oilfield industry, the processing of E&P Waste into reusable materials, in addition to or beyond extraction and separation methods which reclaim raw materials such as crude oil, diesel oil, etc., is recognized as a viable alternative to other methods of disposal.
- B. Commercial facilities may function for the purpose of generating reusable material only, or they may generate reusable material in conjunction with other storage, treatment or disposal operations.
- C. Commercial facilities that produce reusable material are subject to all of the permitting requirements imposed on other commercial facilities. They are also subject to the same operational requirements without regard to the distinction between E&P Waste and reusable material. Existing permits may be amended to allow re-use activities at commercial

facilities which acquire the capability to engage in processing for re-use. Commercial facilities which utilize extraction or separation methods to reclaim raw materials such as crude oil, diesel oil, etc. may do so without amendment of existing permits.

- D. The onsite generation of reusable material by oil and gas operators, pit treating companies or other companies which do not hold a legal commercial facility permit is prohibited unless the company desiring to perform such activities complies with the requirements of this Subparagraph and submits the following information to the commissioner for approval:
- 1. the names, addresses, and telephone numbers of the principal officers of the company;
- 2. a detailed description of the process by which the company will treat pit fluids and/or solids (E&P Waste), including the types of chemicals and equipment used in the process, diagrams, test data, or other information;
- 3. a description of the geographical area in which the company expects to do business (i.e., statewide, north Louisiana, southwest Louisiana, etc.).
- E. In addition to other applicable requirements, companies seeking to be permitted for the production of reusable materials from E&P Waste shall have the following obligations.
- 1. Prior to permit approval or permit amendment approval, applicants must submit the following information:
- a. a detailed description of the process to be employed for generation of reusable material;
- b. type of treatment system and/or equipment to be constructed (or added);
- c. identification of the proposed uses for the reusable material; and
- d. a description of the proposed monitoring plan to be utilized.
- 2. All proposed uses of reusable material must be approved by the commissioner in writing.
- 3. The production of reusable material must be conducted in accordance with a monitoring plan approved by the commissioner with issue of the permit for each facility or process.
- 4. For purposes of regulatory authority only by the Office of Conservation and the establishment of reusable material, compliance with the testing criteria of §565.F below allows permitted companies to offer the material for the following uses:
- a. daily cover in sanitary landfills which are properly permitted by state and/or local authorities. The use of reusable material in a sanitary landfill will require written approval of the Department of Environmental Quality; and
- b. various types of construction material (fill) on a case-by-case basis. The commissioner may approve such use only after submission and review of an application for the

intended use. Approval will be dependent upon the composition of the material and the proposed location of use. Reusable material may not be used as fill for construction purposes unless the specific use has been approved in writing by the Commissioner of Conservation.

F. Testing Criteria for Reusable Material

Parameter	Limitation
Moisture Content	< 50% (by weight) or zero
	free moisture
pH*	6.5-9.0
Electrical Conductivity (EC)	8 mmhos/cm
Sodium Adsorption Ratio (SAR)	12
Exchangeable Sodium Percentage (ESP)	15%
Total Barium:	
Reuse/Stockpile	
at Commercial Facility—	100,000 ppm
Reuse at Location	
other than Commercial Facility—	40,000 ppm
Leachate Testing** for:	
TPH	10.0 mg/l
Chlorides	500.0 mg/l
TCLP Benzene	0.5 mg/l
Leachate Testing**:	
Arsenic	0.5 mg/l
Barium	10.0 mg/l
Cadmium	0.1 mg/l
Chromium	0.5 mg/l
Copper	0.5 mg/l
Lead	0.5 mg/l
Mercury	0.02 mg/l
Molybdenum	0.5 mg/l
Nickel	0.5 mg/l
Selenium	0.1 mg/l
Silver	0.5 mg/l
Zinc	5.0 mg/l
NORM	Not to exceed Applicable
	DEQ Criteria/Limits

- *E&P Waste when chemically treated (fixated) shall, in addition to the criteria set forth be acceptable as reusable material with a pH range of 6.5 to 12 and an electrical conductivity of up to 50 mmhos/cm, provided such reusable material passes leachate testing requirements for chlorides in §565.F above and leachate tests for metals in §565.F above.
- **The leachate testing method for TPH, chlorides and metals is included in the *Laboratory Manual for the Analysis of E&P Waste* (Department of Natural Resources, August 9, 1988, or latest revision).
- G. A reuse stockpile management plan shall be included in the E&P Waste management and operations plan and as a minimum, shall include the following:
- 1. dust emissions controls for loading, transporting and offloading operations;
 - 2. erosion control techniques; and
 - 3. optimum pile height and slope.
- H. The Commissioner of Conservation, the Secretary of the Department of Natural Resources, and the State of Louisiana upon issuance of a permit to a company or commercial facility under this Section shall be held harmless from and indemnified for any and all liabilities arising from the operation of such facilities and use of their products, and the company shall execute such agreements as the commissioner requires for this purpose.

I. Reporting. Each company which generates reusable material must furnish the commissioner a monthly report showing the disposition of all such material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1916 (November 2001), amended LR 29:939 (June 2003).

§567. Closure

- A. All offsite commercial facilities and transfer stations under the jurisdiction of the Office of Conservation shall be closed in a manner approved by the commissioner to insure protection of the public health, safety and welfare or the environment, surface waters, groundwater aquifers and underground sources of drinking water. A plan for closure must be developed in accordance with the requirements of the commissioner. The provisions of any amendment of this rule shall not apply to closure plans which have been previously approved by the commissioner for inactive or abandoned sites which have not been closed.
- B. Closure bond or letter of credit amounts will be reviewed each year prior to the renewal date according to the following process.
- 1. A detailed cost estimate for adequate closure of each permitted commercial facility and transfer station shall be prepared by a independent professional consultant and submitted to the commissioner on or before February 1 of each year.

- 2. The closure plan and cost estimate must include provisions or closure acceptable to the commissioner and must be designed to reflect the costs to the Office of conservation to complete the approved closure of the facility.
- 3. Upon review of the cost estimate, the commissioner may increase, decrease or allow the amount of the bond or letter of credit to remain the same.
- 4. Documentation that the required closure bond or letter of credit has been renewed must be received by September 15 of each year or the commissioner shall initiate procedures to take possession of the funds guaranteed by the bond or letter of credit and suspend or revoke the permit under which the facility is operated. In addition, procedures to initiate permit suspension will be initiated. Any such permit suspension will remain in effect until renewal is documented.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1917 (November 2001).

§569. Exceptions

A. The commissioner may grant an exception to any provision of this amendment upon proof of good cause. The operator must show proof that such an exception will not endanger USDWs.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et sea.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 27:1917 (November 2001).

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 2. Statewide Order No. 29-R

Chapter 7. Fees

§701. Definitions

Application Fee—an amount payable to the Office of Conservation, in a form and schedule prescribed by the Office of Conservation, by industries under the jurisdiction of the Office of Conservation.

Application for Automatic Custody Transfer—an application for authority to measure and transfer custody of liquid hydrocarbons by the use of methods other than customary gauge tanks, as authorized by Statewide Order No. 29-G-1 (LAC 43:XIX.2301 et seq.), or successor regulations.

Application for Commercial Class I Injection Well—an application to construct and/or operate a commercial Class I injection well, as authorized by Statewide Order No. 29-N-1 (LAC 43:XVII.101 et seq.), Statewide Order No. 29-N-2 (LAC 43:XVII.201 et seq.), or successor regulations.

Application for Commercial Class I Injection Well (Additional Wells)—an application to construct and/or operate additional Class I injection wells within the same filing, as authorized by Statewide Order No. 29-N-1 (LAC 43:XVII.101 et seq.), Statewide Order No. 29-N-2 (LAC 43:XVII.201 et seq.), or successor regulations.

Application for Commercial Class II Injection Well—an application to construct and/or operate a commercial Class II injection well, as authorized by Statewide Order No. 29-B (LAC 43:XIX.401 et seq.), Statewide Order No. 29-M-2 (LAC 43:XVII.3101 et seq.), or successor regulations.

Application for Commercial Class II Injection Well (Additional Wells)—an application to construct and/or operate additional commercial Class II injection wells within the same filing, as authorized by Statewide Order 29-B (LAC 43:XIX.401 et seq.), Statewide Order No. 29-M-2 (LAC 43:XVII.3101 et seq.), or successor regulations.

Application for Multiple Completion—an application to multiply complete a new or existing well in separate common sources of supply, as authorized by Statewide Order No. 29-C-4 (LAC 43:XIX.1301 et seq.), or successor regulations.

Application for Noncommercial Injection Well—an application to construct and/or operate a Class I, II or III noncommercial injection well, as authorized by Statewide Order Nos. 29-B (LAC 43:XIX.401 et seq.), 29-M (LAC 43:XVII.301 et seq.), 29-N-1 (LAC 43:XVII.101 et seq.), 29-N-2 (LAC 43:XVII.201 et seq.), 29-M-2 (LAC 43:XVII.3101 et seq.), or successor regulations.

Application for Permit to Drill (Minerals)—an application to drill in search of minerals, as authorized by R.S. 30:28.

Application for Public Hearing—an application for a public hearing as authorized by R.S. 30:1, et seq.

Application for Substitute Unit Well—an application for a substitute unit well as authorized by Statewide Order No. 29-K-1 (LAC 43:XIX.2901 et seq.), or successor regulations.

Application for Surface Mining Development Operations Permit—an application to remove coal, lignite, or overburden for the purpose of determining coal or lignite quality or quantity or coal or lignite mining feasibility, as authorized by Statewide Order No. 29-O-1 (LAC 43:XV.101 et seq.), or successor regulations.

Application for Surface Mining Exploration Permit—an application to drill test holes or core holes for the purpose of determining the location, quantity, or quality of a coal or lignite deposit, as authorized by Statewide Order No. 29-O-1 (LAC 43:XV.101 et seq.), or successor regulations.

Application for Surface Mining Permit—an application for a permit to conduct surface coal or lignite mining and reclamation operations, as authorized by Statewide Order No. 29-O-1 (LAC 43:XV.101 et seq.), or successor regulations.

Application for Unit Termination—an application for unit termination as authorized by Statewide Order No. 29-L-2 (LAC 43:XIX.3101 et seq.), or successor regulations.

Application to Amend Permit to Drill (Injection or Other)—an application to alter, amend, or change a permit to drill, construct and/or operate an injection, or other well after its initial issuance, as authorized by R.S. 30:28.

Application to Amend Permit to Drill (Minerals)—an application to alter, amend, or change a permit to drill for minerals after its initial issuance, as authorized by R.S. 30:28.*

*Application to Amend Operator (transfer of ownership, including any other amendment action requested at that time) for any orphaned well, any multiply completed well which has reverted to a single completion, any non-producing well which is plugged and abandoned within the time frame directed by the commissioner, as well as any stripper crude oil well or incapable gas well so certified by the Department of Revenue shall not be subject to the application fee provided herein.

Application to Commingle—an application for authority to commingle production of gas and/or liquid hydrocarbons and to use methods other than gauge tanks for allocation, as authorized by Statewide Order No. 29-D-1 (LAC 43:XIX.1501 et seq.), or successor regulations.

Application to Process Form R-4—application for authorization to transport oil from a lease as authorized by Statewide Order No. 25 (LAC 43:XIX.901 et seq.), or successor regulations.

BOE—annual barrels oil equivalent. Gas production is converted to BOE by dividing annual mcf by a factor of 7.0.

Capable Gas—natural and casing head gas not classified as incapable gas well gas or incapable oil well gas by the Department of Revenue.

Capable Oil—crude oil and condensate not classified as incapable oil or stripper oil by the Department of Revenue.

Class I Well—a Class I injection well used to inject hazardous or nonhazardous, industrial, or municipal wastes into the subsurface, which falls within the regulatory purview of Statewide Order No. 29-N-1 (LAC 43:XVII.101 et seq.), Statewide Order No. 29-N-2 (LAC 43:XVII.201 et seq.), or successor regulations.

Class I Well Fee—an annual fee payable to the Office of Conservation, in a form and schedule prescribed by the Office of Conservation, on Class I wells in an amount not to exceed \$400,000 for Fiscal Year 2000-2001 and thereafter.

Class II Well—a Class II injection well which injects fluids which are brought to the surface in connection with conventional oil or natural gas production, for annular disposal wells, for enhanced recovery of oil or natural gas, and for storage of hydrocarbons. For purposes of administering the exemption provided in R.S. 30:21(B)(1)(c), such exemption is limited to operators who operate Class II wells serving a stripper oil well or an incapable gas well certified pursuant to R.S. 47:633 by the Severance Tax Section of the Department of Revenue and located in the same field as such Class II well.

Class III Well—a Class III injection well which injects for extraction of minerals or energy.

Emergency Clearance—emergency authorization to transport oil from lease.

Production Fee—an annual fee payable to the Office of Conservation, in a form and schedule prescribed by the Office of Conservation, by oil and gas operators on capable oil wells and capable gas wells based on a tiered system to establish parity on a dollar amount between the wells. The tiered system shall be established annually by rule on capable oil and capable gas production, including nonexempt wells reporting zero production during the annual base period, in an amount not to exceed \$2,450,000 for Fiscal Year 2002-2003 and thereafter.

Production Well—any well which has been permitted by and is subject to the jurisdiction of the Office of Conservation, excluding wells in the permitted and drilling in progress status, Class II injection wells, liquid storage cavity wells, commercial salt water disposal wells, Class V injection wells, wells which have been plugged and abandoned, wells which have reverted to landowner for use as a fresh water well (Statewide Order No. 29-B, LAC 43:XIX.137.G, or successor regulations), multiply completed wells reverted to a single completion, and stripper oil wells or incapable oil wells or incapable gas wells certified by the Severance Tax Section of the Department of Revenue.

Regulatory Fee—an amount payable annually to the Office of Conservation, in a form and schedule prescribed by the Office of Conservation, on Class II wells, Class III wells, storage wells, Type A facilities, and Type B facilities in an amount not to exceed \$875,000 for Fiscal Year 2000-2001 and thereafter. No fee shall be imposed on a Class II well of an operator who is also an operator of a stripper crude oil well or incapable gas well certified pursuant to R.S. 47:633 by the Severance Tax Section of the Department of Revenue and located in the same field as such Class II well. Operators of Record, excluding operators of wells and including, but not limited to, operators of gasoline/cycling plants, refineries, oil/gas transporters, and/or certain other activities subject to the jurisdiction of the Office of Conservation are required to pay an annual registration fee of \$105. Such payment is due within the time frame prescribed by the Office of Conservation.

Type A Facility—commercial E&P waste disposal facilities within the state that utilize technologies appropriate for the receipt, treatment, storage, or disposal of oilfield waste solids and liquids for a fee or other consideration, and fall within the regulatory purview of Statewide Order No. 29-B (LAC 43:XIX.501 et seq.), Statewide Order No. 29-M-2 (LAC 43:XVII.3101 et seq.), or successor regulations.

Type B Facility—commercial E&P waste disposal facilities within the state that utilize underground injection technology for the receipt, treatment, storage, or disposal of only produced saltwater, oilfield brine, or other oilfield waste liquids for a fee or other consideration, and fall within the regulatory purview of Statewide Order No. 29-B (LAC 43:XIX.501 et seq.), or successor regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30{:}21\ \text{et}$ seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 14:542 (August 1988), amended LR 15:551 (July 1989), LR 21:1249 (November 1995), LR 24:458 (March 1998), LR 24:2127 (November 1998), LR 25:1873 (October 1999), LR 26:2302 (October 2000), LR 27:1919 (November 2001), LR 28:2366 (November 2002), LR 29:2499 (November 2003), LR 31:2950 (November 2005).

§703. Fee Schedule for Fiscal Year 2005-2006

A. Fee Schedule

Application Fees	Amount
Application for Unit Termination	\$ 252
Application for Substitute Unit Well	\$ 252
Application for Public Hearing	\$ 755
Application for Multiple Completion	\$ 126
Application to Commingle	\$ 252
Application for Automatic Custody Transfer	\$ 252
Application for Noncommercial Injection Well	\$ 252
Application for Commercial Class I Injection Well	\$ 1,264
Application for Commercial Class I injection Well (Additional Wells)	\$ 631
Application for Commercial Class II Injection Well	\$ 631
Application for Commercial Class II Injection Well (Additional Wells)	\$ 314
Application for Permit to Drill - Minerals: 0'-3,000'	\$ 126
Application for Permit to Drill - Minerals: 3,001'-10,000'	\$ 631
Application for Permit to Drill - Minerals: 10,001' +	\$ 1,264
Drill Minerals Deeper (> 3,000')	\$ 504
Drill Minerals Deeper (> 10,000')	\$ 632
Application to Amend Permit to Drill—Minerals	\$ 126
Application to Amend Permit to Drill—Injection or Other	\$ 126
Application for Surface Mining Exploration Permit	\$ 65
Application for Surface Mining Development Operations Permit	\$ 94
Application for Surface Mining Permit	\$ 2,212
Application to Process Form R-4	\$ 36
Application to Reinstate Suspended Form R-4	\$ 65
Application for Emergency Clearance Form R-4	\$ 65

B. Regulatory Fees

- 1. Operators of each permitted Type A Facility are required to pay an annual Regulatory Fee of \$6,544 per facility.
- 2. Operators of each permitted Type B Facility are required to pay an annual Regulatory Fee of \$3,272 per facility.
- 3. Operators of record of permitted non-commercial Class II injection/disposal wells are required to pay \$666 per well.
- 4. Operators of record of permitted Class III and Storage wells are required to pay \$666 per well.
- C. Class I Well Fees. Operators of permitted Class I wells are required to pay \$9,876 per well.
- D. Production Fees. Operators of record of capable oil wells and capable gas wells are required to pay according to the following annual production fee tiers.

Tier	Annual Production (Barrel Oil Equivalent)	Fee (\$ per Well)
Tier 1	0	15
Tier 2	1-5,000	80
Tier 3	5,001-15,000	227
Tier 4	15,001-30,000	379
Tier 5	30,001-60,000	606
Tier 6	60,001-110,000	834
Tier 7	110,001-9,999,999	1,023

E. Exceptions

- 1. Operators of record of each Class I injection/disposal well and each Type A and B commercial facility that is permitted, but has not yet been constructed, are required to pay an annual fee of 50 percent of the applicable fee for each well or facility.
- 2. Operators of record of each inactive Type A and B facility which have voluntarily ceased the receipt and disposal of E&P Waste and are actively implementing an Office of Conservation approved closure plan are required to pay an annual regulatory fee of 50 percent of the annual fee for each applicable Type A or B facility.
- 3. Operators of record of each inactive Type A or B facility which have voluntarily ceased the receipt and disposal of E&P waste, have completed Office of Conservation approved closure activities and are conducting a post-closure maintenance and monitoring program, are required to pay an annual regulatory fee of 25 percent of the annual fee for each applicable Type A or B facility.

F. Pipeline Safety Inspection Fees

- 1. Owners/Operators of jurisdictional gas pipeline facilities are required to pay an annual Gas Pipeline Safety Inspection Fee of \$15 per mile, or a minimum of \$265, whichever is greater.
- 2. Owners/Operators of jurisdictional hazardous liquids pipeline facilities are required to pay an annual Hazardous Liquids Pipeline Safety Inspection Fee of \$15 per mile, or a minimum of \$265, whichever is greater.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:21 et seq., R.S. 30:560 and 706.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 14:543 (August 1988), amended LR 15:552 (July 1989), LR 21:1250 (November 1995), LR 24:458 (March 1998), LR 24:2128 (November 1998), LR 25:1874 (October 1999), LR 26:2304 (October 2000), LR 27:1920 (November 2001), LR 28:2368 (November 2002), LR 29:350 (March 2003), LR 29:2501 (November 2003), LR 30:2494 (November 2004), LR 31:2950 (November 2005).

§705. Failure to Comply

A. Operators of operations and activities defined in §701 are required to timely comply with this order. Failure to comply by the due date of any required fee payment will subject the operator to civil penalties provided in Title 30 of the Louisiana Revised Statutes of 1950, including but not limited to R.S. 30:18.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:21 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 14:544 (August 1988), amended LR 15:552 (July 1989), LR 21:1251 (November 1995), LR 24:459 (March 1998), LR 24:2128 (November 1998), LR 25:1874 (October 1999), LR 26:2304 (October 2000), LR 27:1921 (November 2001), LR 28:2368 (November 2002), LR 29:2501 (November 2003).

NATURAL RESOURCES

§707. Severability and Effective Date

A. The fees set forth in §703 are hereby adopted as individual and independent rules comprising this body of rules designated as Statewide Order No. 29-R-05/06 and if any such individual fee is held to be unacceptable, pursuant to R.S. 49:968(H)(2), or held to be invalid by a court of law, then such unacceptability or invalidity shall not affect the other provisions of this order which can be given effect without the unacceptable or invalid provisions, and to that end the provisions of this order are severable.

B. This Order (Statewide Order No. 29-R-05/06) supercedes Statewide Order No. 29-R-05/05 and any amendments thereof.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:21 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 14:544 (August 1988), amended LR 15:552 (July 1989), LR 21:1251 (November 1995), LR 24:459 (March 1998), LR 24:2128 (November 1998), LR 25:1874 (October 1999), LR 26:2305 (October 2000), LR 27:1921 (November 2001), LR 28:2368 (November 2002), LR 29:2502 (November 2003), LR 30:2494 (November 2004),), LR 31:2950 (November 2005).

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 3. Statewide Order No. 25

Chapter 9. Reporting

§901. Scope

A. An order providing rules and regulations governing and requiring the keeping of records and the filing of reports by producers, transporters, storers, and refiners of oil, and concerning the production, transportation, storing and refining of oil in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:770 (June 1993).

§903. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this Order:

Barrel or Barrel of Oil—forty-two United States gallons of oil at a test of 60° F with deductions for the full percent of basic sediment, water and other impurities present, ascertained by centrifugal or other recognized and customary tests.

Field—the general area which is underlaid or appears to be underlaid by at least one pool or reservoir of oil as designated by monthly proration schedules issued by the Office of Conservation of the state of Louisiana.

Lease Tank—the tank or other receptacle into which oil is produced either directly from a well or from a well through gas separator, gun barrel or similar equipment.

Month and Calendar Month—the period or interval of time from 7 a.m. on the first day of any month of the calendar to 7 a.m. of the first day of the next succeeding month of the calendar.

Person, Producer, Oil, Illegal Oil, and Product—the meaning prescribed for each of said words as defined in R.S. 30:3.

Refiner—every person who has any part in the control or management of any operation by which the physical or chemical characteristics of oil or products are changed, but exclusive of the operations of passing oil through separators to remove gas, placing oil in settling tanks to remove basic sediment and water, dehydrating oil, and generally cleaning and purifying oil.

Storer—every person as herein defined who stores, terminals, retains in custody under warehouse or storage agreements or contracts, oil which comes to rest in his tank or other receptacle under control of said storer, but excluding the ordinary lease stocks of producers.

Transporter—includes any common carrier by pipe line, barge, boat or other water conveyance or truck or other conveyance except railroads, and any other person transporting oil by pipe line, barge, boat or other water conveyance, or truck and other conveyance.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:770 (June 1993).

§905. Applicability

A. The provisions of this order shall extend and apply to all oil produced from each and every well within the state of Louisiana and all oil transported, stored, or refined within the state of Louisiana, and to every producer, transporter, storer and refiner in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:770 (June 1993).

§907. Form R-4

- A. The Producer's Certificate of Compliance and Authorization to Transport Oil from Lease, Form R-4 Revised or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. Each producer of oil in the state of Louisiana, and each producer of condensate from a gas well, where produced in liquid form at the wellhead by ordinary production methods in the state of Louisiana, shall execute under oath, in quadruplicate, and file with the Office of Conservation, Baton Rouge, Louisiana, on or before the fifteenth day of September, 1941, a Producer's Certificate of Compliance and Authorization to Transport Oil from Lease, Form R-4 Revised or most current revision thereof, setting forth fully therein the data and information indicated by such form covering each lease in the state of Louisiana from which oil or condensate are produced.

- C. After the effective date hereof, whenever there shall occur a change in operating ownership of any lease, well name or lease name, transporter from any lease, a new Producer's Certificate of Compliance and Authorization to Transport Oil From Lease, Form R-4 Revised or most current revision thereof, shall be executed and filed in accordance with the instructions appearing on such form; except that in the case of temporary change in transporter involving less than the allowable for one month, the producer may, in lieu of filing a new certificate, notify by letter the Office of Conservation, Baton Rouge, Louisiana, and the transporter then authorized by certificate on file with the Office of Conservation of the estimated amount of oil to be moved by the temporary transporter and the name of such temporary transporter. A copy of such notice shall also be furnished such temporary transporter. In no instance shall the temporary transporter involve any greater quantity of oil or condensate than the estimated amount shown in said notice.
- D. The Producer's Certificate of Compliance and Authorization to Transport Oil from Lease, Form R-4 Revised or most current revision thereof, when properly executed by the operator and approved by the Office of Conservation, shall constitute authorization to the approved transporter to transport oil or condensate from the lease named therein and shall remain in force and effect until a change occurs, as previously outlined, or is suspended or canceled by the Office of Conservation.
- E. For each drilling permit that shall be altered, amended or changed after its initial issuance, Form MD-10-R-A shall be executed and filed with the Office of Conservation, said Form MD-10-R-A being hereby declared the permanent record of the Office of Conservation for the purpose of identifying the operator of all oil or gas wells in the state of Louisiana; and it is hereby expressly provided that said Form MD-10-R-A shall be subject to the fee for alteration, change or amendment as established by Part XIX, Subpart 2 or successor regulation.
- F. Where a transporter disconnects from a particular lease or ceases to remove oil therefrom and another transporter connects to such lease or begins to take oil therefrom, during a month, the transporter who ceases to take oil shall furnish to the connecting transporter a certified statement under oath, showing: the legal quantity of oil on hand 7 a.m. the first day of such month; the scheduled allowable to the date disconnected; and the quantity of oil moved from that particular lease during the current month. In such case the producer shall furnish to the connecting transporter a certified statement under oath showing the lease stock on hand 7 a.m. the date of new connection. No connecting transporter shall move oil from any such lease until after it shall have received such statements, except with the written permission of the Commissioner of Conservation or his authorized agent.
- G. Each producer is prohibited from delivering illegal oil to any transporter, and each transporter is prohibited from removing any illegal oil from producer's lease tanks. Each transporter shall maintain necessary records of lease allowables and quantities of oil removed from the leases to

which he is connected, whereby he can determine the calculated quantity of legal oil on hand at the close of each calendar month with respect to such leases. The calculated quantity of legal oil on hand with respect to any lease shall be determined for each succeeding month by adding to the quantity of legally produced oil on hand at the first of the month, the scheduled allowable quantity of oil for the respective lease for the current month, as established by the Commissioner of Conservation, less the quantity of oil removed from the respective lease tanks during the current month. If the calculated balance so determined is less than the actual gauged quantity on hand as reported by the producer on Monthly Producer's Crude Oil and/or Condensate Report, Form R-1 Revised or most current revision thereof, the transporter shall not remove during the following month any part of the oil on hand on the first day of the month in excess of the calculated legal balance so established. If the actual quantity of oil on hand with respect to a particular lease equals or is less than the quantity of legal oil established by the above method, the transporter may remove any part or all of such quantity of oil during the current month. Where the actual quantity of oil on hand with respect to a particular lease is less than the calculated quantity of legal oil established by the above method, the transporter, in determining the quantity of legal oil for the next succeeding month, shall substitute the actual quantity on hand for the calculated quantity on hand. Where there is more than one transporter moving oil from the same lease, the producer and transporters are required to furnish to each other information as to the quantity of oil on hand, the quantity transported from lease tanks and any additional information necessary to establish to the satisfaction of each person involved the legal status of the oil produced.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:771 (June 1993).

§909. Form R-1

- A. The Monthly Producer's Crude Oil and/or Condensate Report, Form R-1 Revised or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. Each producer of oil in the state of Louisiana, and each producer of condensate from a gas well, where produced in liquid form at the wellhead by ordinary production methods or as *Calculated Theoretical Condensate*, defined as the amount of condensate (allocated back to leases) that normally would be separated by conventional methods from natural gas well volumes flowing full stream directly to a plant without any condensate separation having been made at lease or a plant, shall furnish for each calendar month a Monthly Producer's Crude Oil and Condensate Report, Form R-1 Revised or most current revision thereof, setting forth complete information and data indicated by such forms respecting oil produced from every lease operated by said producer in the

state of Louisiana, and respecting condensate produced from gas wells at the wellhead in liquid form by ordinary production methods from each lease operated by said producer in the state of Louisiana. Such report for each month shall be prepared and filed according to instructions on the form on or before the twenty-fifth day of the next succeeding month.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

§911. Form R-2

- A. The Transporter's and Storer's Monthly Report, Form R-2 or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. Each transporter of oil within the state of Louisiana shall furnish for each calendar month a Transporter's and Storer's Monthly Report, Form R-2 or most current revision thereof, containing complete information and data indicated by such form respecting stocks of oil on hand and all movements of oil by pipeline within the state of Louisiana and all movements of oil by water craft, or by trucks or other conveyances except railroad, from leases to storers or refiners; between transporters within the state; between storers and refiners within the state.
- C. Each storer of oil within the state of Louisiana shall furnish for each calendar month a Transporter's and Storer's Monthly Report, Form R-2 or most current revision thereof, containing complete information and data indicated by such form respecting the storage of oil within the state of Louisiana.
- D. The transporters and storers reports for each month shall be prepared and filed according to instructions on the form, on or before the twenty-fifth day of the next succeeding month.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

§913. Form R-3

- A. The Refiner's Monthly Report, Form R-3 or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. Each refiner of oil within the state of Louisiana shall furnish for each calendar month a Refiner's Monthly Report, Form R-3 or most current revision thereof, containing the information and data indicated by such form, respecting oil and products involved in such refiner's operations during each month. Such report for each month shall be prepared and filed according to instructions on the form on or before the twenty-fifth day of the next succeeding month.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

§915. Units and Method for Calculation of Quantities of Oil in Tanks

- A. All quantities included in the reports provided for in this Order shall be reported in barrels computed from 100 percent tank tables and based upon actual physical gauges.
- B. All reports provided for in this Order shall be verified by affidavit in the form or forms indicated, and any reports not so verified shall not be taken as filed in compliance with this Order.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

§917. Record Keeping

A. All producers, transporters, storers and refiners within the state of Louisiana shall make and keep appropriate books and records covering their operations in Louisiana from which they may be able to make and substantiate the reports required by this Order.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

§919. Effect on Overall Authority of the Commissioner of Conservation

A. This order shall not be taken or construed to limit or restrict the authority of Commissioner of Conservation to require the furnishing of such additional reports, data or other information relative to the production and processing of gas in this state as may appear to him to be necessary or desirable, either generally or specially, for the prevention of waste and the conservation of natural resources in this state; nor to limit or restrict the authority of the Commissioner of Conservation to waive the filing of any report or reports otherwise required hereunder in any special instance wherein the Commissioner of Conservation finds that such waiver is necessary to prevent undue hardship or imposition.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation January 1, 1941, amended September 1, 1941, March 1, 1961, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:772 (June 1993).

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations

Subpart 4. Statewide Order No. 29-B-a

65

Chapter 11. Required Use of Storm Chokes

§1101. Scope

A. Order establishing rules and regulations concerning the required use of storm chokes to prevent blowouts or uncontrolled flow in the case of damage to surface equipment.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislature of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 15, 1946, amended March 1, 1961, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1127 (October 1994).

§1103. Applicability

- A. All flowing wells with a surface pressure in excess of 100 pounds, falling within the following categories, shall be equipped with storm chokes:
- 1. any locations inaccessible during periods of storm and/or floods, including spillways;
 - 2. located in bodies of water being actively navigated;
 - 3. located in wildlife refuges and/or game preserves;
- 4. located within 660 feet of railroads, ship channels, and other actively navigated bodies of water;
- 5. located within 660 feet of state and federal highways in Southeast Louisiana, in that area East of a North-South line drawn through New Iberia and South of an East-West line through Opelousas;
- 6. located within 660 feet of state and federal highways in Northeast Louisiana, in that area bounded on the West by the Ouachita River, on the North by the Arkansas-Louisiana line, on the East by the Mississippi River, and on the South by the Black and Red Rivers;
 - 7. located within 660 feet of the following highways:
- a. U.S. Highway 71 between Alexandria and Krotz Springs;
- b. U.S. Highway 190 between Opelousas and Krotz Springs;
- c. U.S. Highway 90 between Lake Charles and the Sabine River;
- 8. located within the corporate limits of any city, town, village, or other municipality.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislature of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 15, 1946, amended March 1, 1961, amended and promulgated by Department of Natural Resources, Office of Conservation, LR 20:1128 (October 1994).

§1105. Waivers

A. Onshore Wells. Where the use of storm chokes would unduly interfere with normal operation of a well, the Commissioner of Conservation may, upon submission of pertinent data, in writing, waive the requirements of this order.

B. Offshore Wells

- 1. The district manager, upon submission of pertinent data, in writing explaining the efforts made to overcome the particular difficulties encountered, may waive the use of a subsurface safety valve under the following circumstances, and may, in his discretion, require in lieu thereof a surface safety valve:
- a. where sand is produced to such an extent or in such a manner as to tend to plug the tubing or make inoperative the subsurface safety valve;
- b. when the flowing pressure of the well is in excess of 100 psi but is inadequate to activate the subsurface safety valve:
- c. where flow rate fluctuations or water production difficulties are so severe that the subsurface safety valve would prevent the well from producing at its allowable rate;
- d. where mechanical well conditions do not permit the installation of a subsurface safety valve;
- e. in such other cases as the district manager may deem necessary to grant an exception.
- 2. Under the following circumstances no formal approval is necessary. However, each company will maintain records indicating the date a subsurface safety valve is removed, the reason for its removal, and the date it is reinstalled:
- a. when the flowing pressure of the well is 100 psi or less;
- b. when it is necessary to perform routine maintenance and service work; to clean up completions and recompletions in wells where a subsurface safety valve would otherwise be in service.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislature of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1961, amended March 15, 1961, amended and promulgated by Department of Natural Resources, Office of Conservation, LR 20:1128 (October 1994).

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 5. Statewide Order No. 29-C-4

Chapter 13. Multiple Completions

§1301. Scope

A. This Statewide Order provides rules and regulations governing the multiple completion of wells productive of hydrocarbons from multiple zones in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended June 21, 1960, September 1, 1960, June 15, 1962, March 1, 1967, September 1, 1971, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:766 (June 1993), amended LR 23:583 (May 1997).

§1303. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meaning when found in this Statewide Order.

Commissioner—the Commissioner of Conservation.

District Manager—the head of any one of the districts of the state of Louisiana under the Office of Conservation, and specifically, the manager within whose district the well which is subject to an application under the provisions of this Statewide Order is located.

Multiple Completion—the completion of any well so as to permit simultaneous production from two or more pools while maintaining segregation of each such pool through the single wellbore to the surface. Segregation and simultaneous production of separate intervals within a recognized pool through a single wellbore to the surface shall not be considered a multiple completion.

Owner—as used herein, shall have the meaning as such term is defined in Title 30 of the Louisiana Revised Statutes of 1950.

Pool—as used herein, shall have the meaning as such term is defined in Title 30 of the Louisiana Revised Statutes of 1950.

Selective Completion—the completion of any well utilizing downhole equipment so as to permit production to be changed from one separate pool to another without the necessity of a workover or additional perforating.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended June 21, 1960, September 1, 1960, June 15, 1962, March 1, 1967, September 1, 1971, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:766 (June 1993), amended LR 23:583 (May 1997).

§1305. Order

- A. On and after the effective date hereof, a permit to multiply complete a new or existing well in separate pools, where the proposed completions are in compliance with all applicable Office of Conservation statewide orders, may be obtained by submitting a complete application to drill, as outlined in Part XIX, Subpart 1 (Statewide Order No. 29-B), for each proposed completion concurrent with drilling and/or workover operations on the first completion, or at such other time as a desire to make a multiple completion is known, together with the prescribed fees in accordance with the procedure hereinafter outlined.
- B. In the instance where a multiple completion is applied for, the completions must be in separate pools and the following procedure will be followed in submitting the required data for each multiple completion.
- 1. The applicant shall file the following in duplicate along with the appropriate fees as prescribed by Part XIX, Subpart 2 or successor regulation with the appropriate district manager:
 - a. application for permit to drill (Form MD-10-R);
- b. location plat (as prescribed by Part XIX, Subpart 1, Chapter 1, Section 103).
- 2. After completion of the above well, the applicant shall file in duplicate the following with the appropriate district manager for multiple completion(s):
- a. application for multiple completion (Form A.D.C.);
 - b. completion report (Form Comp.);
- c. electric log or portion thereof of the subject well showing clearly thereon the subsurface of the separate pools in which the applicant has multiply completed the well;
- d. diagrammatic sketch of the wellbore showing the mechanical installation:
 - e. Packer Leakage Test (Form P.L.T.);
 - f. Packer Setting Certificate (Form P.S.C.).
- 3. Any application for recompletion of an existing multiple completion shall comply with §1305.B.2 above.
- C. An allowable will be granted for each completion of a multiply completed well upon the filing of all information, as prescribed in §1305.B.2 above, and after a permit to drill has been issued for each pool in which a completion has been made.

- D. In the event the Commissioner of Conservation approves the multiple completion as requested, the following shall be complied with.
- 1. Each multiple completed well shall be tested upon completion and annually thereafter in the following matter.
- a. All completions shall be shut-in for a sufficient length of time to allow wellhead pressures to become stabilized and for a minimum of two hours thereafter, and a record made of the wellhead pressure buildup in each completion during the shut-in period. At the end of this shut-in period one of the completions shall be produced at such a rate and under such conditions as may be designated by the district manager, or his representative, for a period of six hours while the other completions are kept shut-in, and a record shall be made of the pressures of all completions during the test period. Upon completion of the initial test, the procedure shall be rotated and a following test carried out as outlined above with the completion that was produced during the previous test shut-in.
- b. Under unusual circumstances and conditions of the well being tested, this procedure may be altered providing the desired information is obtained.
- 2. The operator shall submit, in duplicate, to the appropriate district manager, Form P.L.T.
- E. Should the zones approved for multiple completion become intercommunicative, the operator shall immediately repair and separate the pools.
- F. Each separate completion shall be considered a separate well as to permits, allowables, fees and for all other purposes.
- G. The use of selective completion equipment in separate pools is expressly prohibited except as provided herein and no work should precede approval by the Commissioner of Conservation of the application which shall be filed in duplicate with the appropriate district manager.
- 1. Onshore wells will only be considered for administrative approval of selective completion in separate pools where the documentation which follows clearly shows all such separate pools to be wholly contained within one lease. The application shall include the following:
- a. application for multiple completion (Form A.D.C.);
- b. electric log or portion thereof of the subject well showing clearly thereon the subsurface of the separate pools which applicant proposes to selectively complete in the well;
- c. diagrammatic sketch of the wellbore showing the proposed mechanical installation;
- d. lease ownership map showing all leases in area of the subject well and the productive outlines of the pools proposed for selective completion;

- e. subsurface structure maps on each pool proposed for selective completion showing all boundaries which establish the productive outlines;
 - f. work permit (Form DM4R).
- 2. Offshore wells will be considered for administrative approval of selective completion in separate pools upon submission of the documentation required under §1305.G.l.a-f. Additionally, if the productive limits of any separate pool included in the application underlies more than one lease, the items listed below will also be required:
- a. a list of the names and addresses of the owners of the leases shown to be underlain by the separate pools;
- b. written concurrence of all the owners shown on the list required in §1305.G.2.a.
- H. Notwithstanding the provisions of the previous Paragraph, an application for selective completion may be filed with the appropriate district manager for a well that does not meet all requirements set forth in §1305.G upon showing for good cause that such request should be considered. An exceptional application of this nature will be considered for administrative approval by the Commissioner of Conservation upon recommendation of the district manager as a last resort to prevent the loss of oil and gas that could not be recovered by any other means than through the use of selective completion equipment or under other exceptional circumstances as determined to be appropriate by the commissioner.
- I. In the event a well is authorized for selective completion in separate pools, the operator thereof shall continuously monitor the performance of such well in an effort to determine that the separate pools remain isolated and shall secure a work permit from the district manger before affecting a change from one separate pool to another through the use of the downhole selective equipment. Also, each such change in pool shall be considered a recompletion and all reports normally filed when recompleting a well will be required.
- J. The foregoing shall supersede and replace the provisions of Statewide Order No. 29-C, and all prior amendments thereto and all prior memoranda issued thereunder and shall govern the multiple and selective completion of wells productive of hydrocarbons in the state of Louisiana.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended June 21, 1960, September 1, 1960, June 15, 1962, March 1, 1967, September 1, 1971, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:766 (June 1993), amended LR 23:583 (May 1997).

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 6. Statewide Order No. 29-D-1

69

Chapter 15. Commingling of Oil and Gas Production Onshore

§1501. Scope

A. This Statewide Order provides rules and regulations governing the applications for commingling and the use of methods other than gauge tanks for allocation of production from fields in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:768 (June 1993), amended LR 23:585 (May 1997).

§1503. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings where found in this Statewide Order.

Commingling—the combination of gas and/or liquid hydrocarbon production before sales from two or more leases and/or units, subject to the following:

- a. combination of lease production with production from a unit which is wholly contained geographically within that lease is not considered commingling;
- b. no additional commingling approval is required for a unit if approval to commingle at the same commingling facility has previously been independently granted covering all leases contributing to the subject unit;
- c. once commingling approval for a unit has been granted, no additional commingling approval is required if interests in a unit change or the unit is revised if no new leases are added as a result of the change or unit revision.

Commingling Facility—any facility which has been authorized by the office for commingling as defined herein.

Commissioner—the Commissioner of Conservation.

District Manager—the head of any one of the districts of the state of Louisiana under the Office of Conservation, and specifically, the manager within whose district the field or fields are located from which the applicant proposes to commingle production.

Interested Party—any person who is known to the applicant after reasonable search to presently own an interest in production from the leases or units being considered for commingling.

Office—the Office of Conservation of the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:768 (June 1993), amended LR 23:585 (May 1997).

§1505. Order

A. From and after the effective date hereof, permission to commingle gas and/or liquid hydrocarbons and to use metering, well test or other methods for allocation of production may be obtained as hereinafter provided and upon strict compliance with the procedures set forth herein.

1. Metering

- a. No authority to commingle gas and/or liquid hydrocarbons and to use metering for allocation of production will be granted unless and until the following data and information have been filed with the commissioner with a copy to the district manager:
- i. a completed application form for permission to commingle gas and/or liquid hydrocarbon production along with the requisite fee;
- ii. a diagrammatic sketch of the mechanical installation to be used along with a detailed explanation of the flow of the gas and/or liquid hydrocarbons, the procedures and frequency for calibration/proving of metering devices and allocation formula to be utilized;
- iii. a signed statement that, in the opinion of the applicant, the commingling of gas and/or liquid hydrocarbons and the use of metering for allocation of production in a manner proposed will provide reasonably accurate measurement, will not create inequities, and will afford the owner of any interest the opportunity to recover his just and equitable share of production;
- iv. a list of interested parties. This list shall include only those parties who have interests in the leases and/or units from which production is to be commingled if approval is granted to the applicant and for which the applicant has no existing commingling authority.
- b. Notice of the filing of an application to commingle and to use metering for allocation of production shall be published in the official journal of the state of Louisiana (by the Office of Conservation) and mailed (by the applicant) to the interested parties with an affidavit of mailing submitted to the Office of Conservation. A copy of the application does not have to be mailed to all interested parties.

- c. No administrative approval for the commingling of gas and/or liquid hydrocarbons and the use of metering for allocation of production will be granted, if, in the judgment of the commissioner, after considering all the data and information submitted, including any opposition expressed by interested parties, administrative approval is not warranted, or in the event any interested party files an application for a public hearing opposing the granting of commingling authority, together with the requisite hearing fee, within 10 days following the first publication of the notice of the application. The party seeking commingling authority may also elect to file an application setting the matter for consideration at a public hearing if administrative approval is not granted.
- d. Should the application for the use of metering be approved, the applicant shall provide a suitable means of testing each meter in order that the accuracy of any meter in operation can be proven, such testing to be done monthly for liquid hydrocarbon allocation meters and quarterly for gaseous hydrocarbon allocation meters or at such other times as the Commissioner of Conservation shall prescribe. The applicant shall retain the actual reports of such tests, and such reports shall be kept on file and available for inspection by any agent of the Office of Conservation or any interested party for a period of not less than three years. Permission, in writing, from the Office of Conservation must be obtained for all by-pass or other lines that will permit flow around the regular meter, and each such line must have a meter that will permit measurement. The commissioner may grant an exception to this requirement if it is established to his satisfaction that good grounds exist justifying said exception.
- e. Emergency authorization to commingle may be obtained from the Office of Conservation for 90 days upon proper showing that the methods of production and allocation meet the minimum standards necessary for formal approval if the well(s) would otherwise have to remain shutin pending formal approval. Under exceptional circumstances this period may be extended for good cause shown but for no longer than needed for an applicant diligently pursuing formal approval.
- f. Consolidation of two or more facilities may be approved administratively without the necessity of a public hearing by submitting a request for such to the Office of Conservation.
- g. All allocation measurements must be in accordance with the American Petroleum Institute (API) *Manual of Petroleum Measurement Standards*, Chapter 20, Allocation Measurement.

2. Well Tests

a. No authority to commingle gas and/or liquid hydrocarbons and to use well tests for allocation of production will be granted unless and until the following data and information have been filed with the commissioner with a copy to the district manager:

- i. a completed application form for permission to commingle gas and/or liquid hydrocarbon production along with the requisite fee;
- ii. a diagrammatic sketch of the mechanical installation to be used along with a detailed explanation of the flow of the gas and/or liquid hydrocarbons, the procedures and frequency of well tests and for calibration/proving of any metering devices and allocation formulas to be utilized;
- iii. a signed statement that, in the opinion of the applicant, the commingling of gas and/or liquid hydrocarbons and the use of well tests for allocation of production in the manner proposed will provide reasonably accurate measurement, will not create inequities, and will afford the owner of any interest the opportunity to recover his just and equitable share of production;
- iv. a list of interested parties. This list shall include only those parties who have interests in the leases and/or units from which production is to be commingled if approval is granted to the applicant and for which the applicant has no existing commingling authority.
 - b. The application shall also include:
- i. written approval of 100 percent of all interested parties; or
- ii. a request for a public hearing pursuant to R.S. 30:6; or
- iii. if the applicant can demonstrate that one or more prior commingling applications for the use of well test allocation at the subject commingling facility have been unsuccessful in obtaining 100 percent approval, that approval was granted by order after a public hearing, and that all leases involved in the subject application are the same as the prior applications (i.e., no new leases), then the applicant may request, and the commissioner may authorize, the processing of such application under the same procedures outlined in §1505.A.2 and 3 of this Statewide Order.
- c. Should the application for the approval of the use of well tests be approved, such testing shall be done in a manner that meets or exceeds the minimum standards set forth herein below.
- i. All wells shall be tested a minimum four hours at least once a month to determine productivity rate.
- ii. Wells having any erratic producing characteristics that cause variable rates of flow while producing on a continuous choke size shall be tested a minimum of four hours biweekly to determine productivity rate.
- iii. If at any time between the regular testing periods, as outlined above, the choke size of any well is changed, the time and date of change shall be recorded and productivity rate test conducted after the well has stabilized on the new choke. Production allocation shall be made according to these various productivity rates for the time they were in effect.

- iv. If at any time the choke in a well is changed because of wear, tests shall be conducted before the choke is changed and after the well has stabilized on the new choke. The average rate between the previous productivity rate test and the productivity rate test conducted immediately after the choke has been changed shall be used to determine production for this period back to the first day of the current month.
- v. If the producing characteristics of a well significantly change between the regular testing periods, such as: the beginning or increase in water percentage; a change in gas-oil ratio, especially above the 2000/1 limit; or considerable change in tubing pressure, etc., then tests shall be made at no longer than one-week intervals until production again stabilizes.
- vi. Daily checks on individual wellhead pressures shall be recorded and maintained by the operator of each well covered by the approval to commingle by well tests, provided weather permits.
- vii. If any operator feels that some other interval of testing is appropriate, he may request an exception to the above guidelines by writing the commissioner with a copy to the district manager outlining his problems and suggested interval of testing. The commissioner may, after consultation with the district manager and staff, grant such exceptions as he deems appropriate by special administrative order without a public hearing.
- viii. All allocation measurements must be in accordance with the American Petroleum Institute (API) *Manual of Petroleum Measurement Standards*, Chapter 20, Allocation Measurement.
- d. All required tests shall be recorded on Form DM-1-R, Form DT-1, or a document with a similar format and made available for inspection by any agent of the Office of Conservation or any interested party for a period of not less than three years.
- e. Emergency application to commingle may be obtained from the Office of Conservation for 90 days upon proper showing that the methods of production and allocation meet the minimum standards necessary for formal approval if the well(s) would otherwise have to remain shutin pending formal approval. Under exceptional circumstances this period may be extended for good cause shown but for no longer than needed for an applicant diligently pursuing formal approval.
- f. Consolidation of two or more facilities may be approved administratively without the necessity of a public hearing by submitting a request for such to the Office of Conservation.

3. Other

a. If any operator feels that commingling of gas and/or liquid hydrocarbons utilizing some method other than metering or well tests for allocation of production is appropriate, he may seek permission to do so in the manner hereinafter provided and upon strict compliance with the procedures set forth herein.

- b. No authority to commingle gas and/or liquid hydrocarbon production utilizing any method will be granted unless and until the following data and information have been filed with the commissioner with a copy to the district manager:
- i. a completed application form for permission to commingle gas and/or liquid hydrocarbon production along with the requisite fee;
- ii. a diagrammatic sketch of the mechanical installation to be used along with a detailed explanation of the flow of the gas and/or liquid hydrocarbons and the manner in which measurement and allocation will be accomplished, including the procedures and frequency of well tests, calibration/proving of any metering devices and allocation formulas to be utilized:
- iii. a signed statement that, in the opinion of the applicant, the commingling of gas and/or liquid hydrocarbons and the use of the method cited for allocation of production in the manner proposed will provide reasonably accurate measurement, will not create inequities, and will afford the owner of any interest the opportunity to recover his just and equitable share of production;
- iv. a list of interested parties. This list shall include only those parties who have interests in the leases and/or units from which production is to be commingled if approval is granted to the applicant and for which the applicant has no existing commingling authority.
- c. The commissioner shall advise the applicant whether such application will be processed under the provisions of §1505.A1-2, or some alternative procedure he deems appropriate at his discretion, and the applicant shall take the actions so mandated if he wishes to continue pursuit of approval of his application.
- d. Emergency authorization to commingle may be obtained from the Office of Conservation for 90 days upon proper showing that the methods of production and allocation meet the minimum standards necessary for formal approval if the well(s) would otherwise have to remain shutin pending formal approval. Under exceptional circumstances this period may be extended for good cause shown but for no longer than needed for an applicant diligently pursuing formal approval.
- e. Consolidation of two or more facilities may be approved administratively without the necessity of a public hearing by submitting a request for such to the Office of Conservation.
- f. This Statewide Order shall supersede Statewide Order No. 29-D, but shall be in addition to all other statewide orders, rules and regulations affecting the drilling and production of gas and/or liquid hydrocarbons heretofore promulgated. To the extent of any conflict with such other orders, rules and regulations, however, provisions of this Statewide Order shall govern. In case of any conflict between this Statewide Order and the special orders on specific fields, said special orders on specific fields shall govern.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:768 (June 1993), amended LR 23:585 (May 1997).

Chapter 17. Commingling of Oil and Gas Production Offshore

§1701. Scope

A. This order provides rules and regulations governing the commingling and the use of methods other than gauge tanks for allocation of production, and the establishment of permissive minimum standards for the commingling of production and allocating the commingled production to the individual wells in the offshore areas of Louisiana.

 $AUTHORITY\ NOTE: \ \ Promulgated \quad in \quad accordance \quad with \\ R.S.30:4\ et\ seq.$

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:769 (June 1993).

§1703. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

Deficient Wells—with reference to this particular order, wells producing more than 25 percent BS&W, and/or incapable of producing the current monthly depth bracket allowable.

District Manager—the head of any one of the districts of the state and under the Office of Conservation, and as used, refers specifically to the manager within whose district the well or wells are located.

Office—the Office of Conservation of the state of Louisiana.

Productivity Rate—the rate of which the well is producing into the common storage.

Top Allowable Wells—proratable wells capable of producing the current monthly depth bracket allowable.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:769 (June 1993).

§1705. Order

A. From and after the effective date hereof, permission to commingle gas and/or liquid hydrocarbons and to use methods other than gauge tanks for allocation of production in the offshore areas of Louisiana may be obtained without the necessity of a public hearing in the absence of protests, as hereinafter provided and upon strict compliance with the procedure set forth herein, and upon strict compliance with the permissive minimum standards as set forth in §1705.D below.

- B. The provisions of Part XIX, Subpart 6, Chapter 15, §1505.A, with reference to the filing of required data and information, shall be incorporated in this supplement order by reference.
- C. Notice of the filing of the application to commingle and to use methods other than gauge tanks for the allocation of production, shall be mailed to the State Mineral Board of the state of Louisiana, and where the field or fields made subject to the application is seaward of the Zone I line as defined in the State of Louisiana—United States Agreement of October 12, 1956, a notice shall be mailed to the supervisor of the United States Geological Survey.
- D. Should the application be for the approval of the use of well tests in lieu of gauge tanks, and should the application for same be approved, such testing shall be done in compliance with the permissive minimum standards as set forth herewith:
- 1. all top allowable wells shall be tested a minimum of four hours at least once a month to determine productivity rate;
- 2. deficient wells shall be tested a minimum of four hours at least twice a month to determine productivity rate;
- 3. wells having any erratic producing characteristics that cause variable rates of flow while producing on a continuous choke size, shall be tested a minimum of four hours at least weekly to determine productivity rate;
- 4. if at any time between, the regular testing periods, as outlined above, the choke size of any well is changed, the time and date of change shall be recorded and a productivity rate test conducted after the well has stabilized on the new choke. Production allocation would be made according to these various productivity rates for the time they were in effect;
- 5. if at any time the choke in a well is changed because of wear, a test shall be conducted before the choke is changed and another one after the well has stabilized on the new choke. The average rate between the previous productivity rate test and the productivity rate test conducted immediately after the choke change should be used to determine production for this period only back to the first day of the current month;
- 6. if the producing characteristics of a well change between the regular testing periods, such as: the beginning or increase in water percentage; a change in gas-oil ratio, especially above the 2000/1 limit; or, considerable change in tubing pressure, etc., then tests shall be made at no longer than one week intervals until production again stabilizes;
- 7. periodic spot checks should be made by members of the office, especially on unstable wells, water producing wells, and high gas-oil ratio wells;
- 8. daily checks on individual well head pressures shall be recorded and maintained by the operator of each well which has been granted permission to commingle in the offshore areas provided weather permits;

- 9. if any operator feels that some other interval of testing is appropriate he may request an exception to the above in writing addressed to the district manager outlining his problems and suggested interval of testing. The commissioner may, upon recommendation of the district manager and his staff, grant such exception as he deems appropriate by special administrative order without a public hearing.
- E. Should approval be given, the applicant shall indicate in the remarks column of each current R-1 Report that appropriate monthly well tests have been conducted. The applicant shall retain the actual reports of such tests and such reports shall be kept on file and available for inspection by any agent of the Office of Conservation or any party at interest, for a period of not less than three years.
- F. The results of all tests required by this order shall be certified as being true and correct by the party performing the tests.
- G. This order shall be cumulative of, and in addition to all statewide orders, rules and regulations affecting the drilling and production of gas and/or liquid hydrocarbons in the offshore areas of Louisiana, as heretofore promulgated and when in conflict therewith shall prevail.

 $\label{eq:authority} \begin{array}{lllll} AUTHORITY \ NOTE: & Promulgated & in & accordance & with \\ R.S.30:4 \ et \ seq. & \end{array}$

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1955, amended February 25, 1957, June 1, 1962, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:769 (June 1993).

Part XIX. Office of Conservation—General Operations Subpart 7. Statewide Order No. 29-E

Chapter 19. Oil and Gas Well Spacing

§1901. Scope

A. This order establishes rules and regulations for spacing of wells drilled in search of oil and gas in areas of Louisiana for which no spacing regulations have been prescribed by Special Orders.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, August 1, 1957, amended September 1, 1957.

§1903. Definitions

A. *Property Line*—as used herein shall mean the boundary dividing tracts on which mineral rights, royalty, or leases are separately owned, except that where conventional units shall have been created for the drilling of the well, the boundaries of the unit shall be considered the property line.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, August 1, 1957, amended September 1, 1957.

§1905. Order

A. IT IS ORDERED THAT no permits shall be issued for the drilling of wells in search of oil or gas and no well shall be drilled in search of oil or gas nor shall a well be abandoned in one pool and recompleted in another pool in a field in Louisiana in which no spacing rule are prescribed by special orders, unless the location of such well shall comply with the following requirements.

- 1. No spacing shall be required for wells drilled in search of oil to depths less than 3,000 feet subsea, except as provided for in the last Paragraph of this order.
- 2. Wells drilled in search of oil to depths below 3,000 feet subsea shall not be located closer than 330 feet from any property line nor closer than 900 feet from any other well completed in, drilling to, or for which a permit shall have been granted to drill to, the same pool.
- 3. Wells drilled in search of gas shall not be located closer than 330 feet to any property line nor closer than 2,000 feet to any other well completed in, drilling to, or for which a permit shall have been granted to drill to, the same pool.
- 4. When an order has been issued creating a pattern of drilling or developmental units for a pool, if application is made for a permit to drill a well outside of the unit pattern

which might develop an extension of the pool, the commissioner may require that such well be located and drilled in compliance with the provisions of orders affecting that pool.

- 5. All applications for permits to drill in search of oil or gas shall contain with such application a commercial ownership map containing such information that is in the possession of the applicant showing:
- a. the location of existing producing or drilling wells:
- b. the lease and property ownership of tracts offsetting or in the vicinity of the well for which the permit is sought; and
- c. the location of the proposed well with respect to property and lease lines, as provided for in Part XIX, Subpart 1.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, August 1, 1957, amended September 1, 1957.

§1907. Exceptions

- A. Exceptions to the above shall be granted when conforming to the following requirements.
- 1 Where prior to the issuance of this order, a pool has already been partially developed with a greater density of wells than that prescribed herein, the Commissioner of Conservation may, without additional public hearing, exempt such pools from the provisions of this order. The exemptions for these pools shall be granted only after application has been made to the Commissioner of Conservation in writing accompanied by a map delineating the location of all existing wells completed and producing from the pool for which exception is being asked.
- 2. Where prior to the issuance of this order a well has previously been completed at a location offsetting the property or unit line closer to the property or unit line than the setback prescribed herein, the commissioner may, without additional public hearing permit like exception for this offsetting well, such exception to be limited to the pool from which the offsetting well is producing.
- 3. The commissioner may, without additional public hearing exempt from this order wells drilled in areas which he considers to be affected by piercement type salt domes or other complexly faulted areas to which, in the opinion of the commissioner, this order would not be properly applicable. These requests for exceptions shall also be made in writing to the Commissioner of Conservation accompanied by sufficient evidence to justify the exempt classification.

- 4. Where a permit is requested for a wildcat well to be drilled in an area in which the surface or mineral ownership is so divided that the well cannot be located in compliance with the requirements of this order and a drilling unit cannot be formed in advance of drilling because it is not known whether the well will be completed as an oil well or a gas well, a permit may nevertheless be granted for the drilling of the well when the applicant presents evidence satisfactory to the commissioner that the applicant has available for assignment to said well leases or acreage of area and side to constitute, in the judgment of the commissioner, a reasonable producing unit for such well and such applicant agrees to create or to apply to the commissioner for creation of a reasonable producing unit within a reasonable time after completion of the well.
- 5. In addition to the exceptions provided for in \$1907.A.1-4 hereof, the commissioner may, without additional public hearing, grant an exception to the provisions of this order in any case where the granting of such an exception appears to be necessary to prevent waste, to prevent inequity or loss of property rights. Such an exception shall be considered and granted under this Paragraph only when the applicant shall have furnished the following data and evidence through the district manager.
- a. A letter setting forth all pertinent facts and reasons why the granting of the exception is necessary.
- b. A formal application for permit to drill—Form MD-10-R.
- c. An ownership map as required by the provisions of §1905.A.5.a-c hereof.
- d. A written certificate that copies of the letter request provided for in §1907.A.5.a hereof and of the ownership map have been sent to each lease owner of tract offsetting or in the vicinity of the proposed well.
- i. If within 10 days after the filing of the application no protest shall have been made in writing by any party and if the commissioner considers that from the evidence submitted the requested permit should be granted, he may issue it forthwith and without a public hearing. If a written protest should be filed within the 10-day period, the commissioner may in his discretion either:
- (a). issue or deny the permit based on the available evidence; or
 - (b). call a public hearing after legal notice.

ii. If the permit application is denied without a public hearing, the applicant then may apply for and obtain a public hearing in the manner provided by law.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, August 1, 1957, amended September 1, 1957.

§1909. Additional Specifications

- A. When the pools covered by this order have had four wells drilled to and completed therein or after one year has elapsed from the completion of the first well in the field, whichever occurs first, the operator of wells in the field shall petition the Commissioner of Conservation for a public hearing for the purposes of establishing field rules and regulations and the creation of drilling units for the pools in the field. The right is reserved, however, to any party in interest to apply for a hearing at an earlier date: and if the commissioner finds from an examination of the information furnished in connection with any application for a drilling permit that an earlier hearing should be held to establish rules and drilling units, the commissioner may impose a condition in the drilling permit that such an application be filed within a reasonable time, to be specified by the commissioner, after the successful completion of the well in the horizon to which it is projected.
- B. This order is intended only to regulate the spacing of wells prior to the establishment of special rules and regulations and the creation of drilling units, and it should not be construed as having the effect of unitizing separate ownerships or of creating drilling or spacing units.
- C. This order also is not intended to eliminate pools shallower than 3,000 feet from appropriate rules and regulations, including spacing regulations after notice and public hearing. After sufficient geological and engineering evidence is available with respect to these pools found at depths of 3,000 feet or less subsea then the operator or operators owning wells therein are required to petition the Commissioner of Conservation for a public hearing for the purpose of establishing rules and regulations and the creation of drilling units for each such pool.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et seq}$.

HISTORICAL NOTE: Adopted by the Department of Conservation, August 1, 1957, amended September 1, 1957.

Part XIX. Office of Conservation—General Operations Subpart 8. Statewide Order No. 29-F

Chapter 21. Allowable Production of Natural Gas

§2101. Scope

A. Concerning the establishment of allowable production of natural gas from wells in Louisiana classified by the Department of Conservation as gas wells producing from non-associated gas pools; prescribing the manner in which allowable gas maybe produced and providing a uniform manner for balancing overproduction and underproduction.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (November 8, 1955), amended (July 1, 1959).

§2103. Order

A. The volume of natural gas permitted to be produced from all wells in Louisiana classified by the Department of Conservation as gas wells producing from non-associated gas pools (hereinafter referred to as "allowable"), shall be established in the manner hereinafter set forth and gas shall be produced from such wells in the manner herein prescribed.

1. Application

- a. This order shall apply to all wells in Louisiana producing gas from nonassociated gas pools, whether covered by Special Order or not, and any provisions of prior orders, including Special Field Orders, conflict herewith are hereby modified to the extent of such conflict only.
- b. This order shall not apply to casinghead gas produced from wells classified by the Department of Conservation as oil wells, nor to pools in which gas cycling or pressure maintenance projects have been covered by Special Orders.
- c. Where a gas pool reaches a stage of depletion which would render the enforcement of this order impracticable or unduly burdensome either on the Department of Conservation or upon the producers, gathers or purchasers of gas from such pool, the Commissioner of Conservation may exempt such pool from the provisions of this order by notice to the producers and purchasers of gas from the pool who filed producers or transporters reports with the Department of Conservation for the month immediately prior thereto.

2. Nominations

a. On or before December 5, 1955, and on or before the fifth day of March, June, September and December of each year thereafter, each gas purchasing company, user, transporter, gathering system operator or other party receiving gas at the well or at a central delivery point shall file gas nominations in the form of affidavits, stating the volume of gas which will be purchased or withdrawn from each pool within a field during the next succeeding calendar quarter of the year. These nominations shall be filed, in duplicate, by the conservation district, with one copy to the commissioner and one copy to the appropriate district office. These nominations must conform to the actual volumes of gas which the nominator anticipates will be required to fulfill its requirements from the field during the succeeding calendar quarter of the year and shall be expressed on a daily average for the period. At the same time the nominator shall report to the commissioner the actual volume of gas purchased, used, or transported by it during the corresponding quarter of the previous calendar year and shall also be expressed on a daily average for the period.

3. Allowables

- a. The commissioner may supplement such nominations and reports with gas market information otherwise available to him, and will then determine the reasonable market demand for gas to be produced during such next ensuing quarterly period from each pool. The total indicated requirements for a pool shall then be allocated among the wells within the pool in accordance with the formula adopted for such pool, by Special Order applicable to such pool, or, if no formula has been adopted for a pool by a Special Order, shall be apportioned among the producing wells in the pool in proportion to the productive area assigned to each well.
- b. If any well or wells shall be incapable of producing the full allowable so determined, an allowable shall be fixed for each such well upon the basis of its ability to produce, and the aggregate allowables of such wells as so fixed shall be subtracted from the reservoir allowable, and the remainder of the allowable for the pool shall be allocated to the remaining wells upon the basis of the formula in effect.
- c. The scheduled allowables for each well as issued by the Commissioner of Conservation for each quarterly period shall be expressed as an average daily allowable for the period. For the purpose of reporting monthly production to the commissioner, the daily allowable for each well times the number of days in the calendar month shall be reported as the monthly allowable.
- d. No gas well shall be entitled to an allowable, nor shall an allowable be granted, until all necessary physical connections are made to permit full utilization of the allowable to be granted nor until a plat has been filed, in triplicate, with the Commissioner of Conservation showing the productive acreage attributable to said well, the location

of all wells on the lease and immediately surrounding the lease producing from the reservoir and the ownership of said lease. Should the commissioner consider that any acreage assigned by an operator to a well for the computation of allowable production not to be productive, the commissioner may exclude such acreage which he considers nonproductive in computing the allowable production for the well, or may require the operator to file new plat of acreage assignable to the well all of which the commissioner considers to be productive.

- e. Allowables for newly completed gas wells shall commence on the date of completion provided the well is physically connected to a market and provided a plat is on file. No productive acreage attributed to a well shall be attributed to any other drilling or producing well in the same pool. The allowable for a new well completed in a pool during any allowable period shall be established by the same formula as was used in fixing the allowable for wells already producing from that pool at the beginning of the allowable period.
- f. The commissioner shall have the right, when emergencies arise, to issue such emergency allowables as become necessary in order to satisfy, for the period of the emergency, an increased demand for gas.

4. Balancing of Production to Allowable

- a. Except as hereinafter prohibited, any gas well may produce during a calendar month twice the allowable assigned to it, provided that its production shall be brought into balance at the times and in the manner herein prescribed. When the monthly production from a well exceeds its monthly allowable, the excess shall be termed *overproduction*, and when a well's monthly production is less than its monthly allowable the deficiency shall be termed "underproduction."
- b. Each producer shall keep a monthly account of the cumulative production status of each gas well as to overproduction and underproduction and shall report such cumulative production status on the R5P reports filed monthly with the Department of Conservation.
- c. For the purpose of this order, on July 1, 1955, all gas wells shall be considered in balance and not credited with any underproduction or charged with overproduction, but thereafter when any gas well shall have a cumulative overproduction status the last six months of any year, the operator or owner of such well shall reduce the production of gas from the well during the first six months of the following year below the regular allowables so as to bring its production in balance with its allowable by the first day of July of that year. Such reduced production may be at varying rates of withdrawal, normally experienced in gas production and marketing, so long as the overproduction is eliminated by the first day of July. Any well having a cumulated overproduction status on the first day of July of any year shall be closed in and not produced until such overproduction is entirely eliminated.
- d. When any gas well shall have a cumulative underproduction status at the end of the last six months of

any year, such underproduction may be made up during the first six months of the following year, but any underproduction remaining on the first day of July of any year shall be canceled and shall not thereafter be made up.

5. Capability of Wells to Produce

- a. Anything herein contained to the contrary notwithstanding, no well shall be produced in excess of its maximum efficient rate of production nor at a monthly rate in excess of twice its monthly allowable, even during make-up periods.
- b. Unless waived by the commissioner, each producer shall conduct semiannual deliverability tests of each producing gas well by methods approved by the commissioner: the results of such tests to be reported on Form DT-1 entitled Gas Well Deliverability Test. Conservation district managers may schedule test periods for each field in his district and notify all producers at least 10 days in advance of such field tests, and in that instance, such deliverability tests shall be made in accordance with the schedule. Where no such schedule is made in a conservation district, each producer may schedule such tests at his own convenience, but shall give the manager of the conservation district in which the well is to be tested notice at least 10 days in advance of the proposed test, in order that the district manager may have the test witnessed by a representative of the conservation department if he so desires.
- c. When any well becomes incapable of producing its current allowable, or when the allowable assigned to a well exceeds an efficient producing rate or might result in injury to the well or reservoir, such matters shall be reported to the manager of the conservation district in which the well is located within five days after they become known to the producer, and the allowable for that well shall be reduced to its productive capacity or efficient rate, whichever is lower.
- d. When any well shall cease to produce or be incapable of delivering gas into the line, the producer shall report that fact to the manager of the conservation district where the well is located.

6. Ratable Take

a. During the last six months of each year, the commissioner shall make a survey of the production of gas from fields having more than one market. Should the commissioner find that during the preceding six-month period, gas has not been taken ratably from the wells in any reservoir in accordance with the allowables established by him, he shall call a conference of all producers, purchasers and gatherers who are currently filing with the Department of Conservation reports of production, purchase or transportation of gas from the reservoir, and determine the reason why gas has not been taken in accordance with the allowables established by him and shall make such adjustments in allowables or take such further action as he may deem appropriate to accomplish a ratable taking of gas from the various wells in the reservoir.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation (November 8, 1955), amended (July 1, 1959).

Part XIX. Office of Conservation—General Operations Subpart 9. Statewide Order No. 29-G-1

Chapter 23. Automatic Custody Transfer

§2301. Scope

A. This Statewide Order provides rules and regulations governing applications for measurement and transfer of custody of liquid hydrocarbons by the use of methods other than customary gauge tanks from fields in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, July 15, 1959, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:758 (June 1993), amended LR 23:580 (May 1997).

§2303. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this Statewide Order.

Automatic Custody Transfer—that the liquid hydrocarbons were automatically measured as they are transferred from the producer to the carrier.

Commissioner—the Commissioner of Conservation.

District Manager—the head of any one of the districts of the state of Louisiana under the Office of Conservation, and specifically, the manager within whose district the field or fields affected by the application are located.

Interested Party—any person who is known to the applicant after reasonable search to presently own an interest in production being considered for automatic custody transfer.

Office—the Office of Conservation of the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, July 15, 1959, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:758 (June 1993), amended LR 23:580 (May 1997).

§2305. Order

A. From and after the effective date hereof, permission to measure and transfer custody of liquid hydrocarbons by use of methods other than customary gauge tanks may be obtained as hereinafter provided and upon strict compliance with the procedure set forth herein.

- B. No permission to use methods other than customary gauge tanks for measurement and custody transfer of liquid hydrocarbons will be granted unless and until the following data and information have been filed with the commissioner with a copy to the district manager:
- 1. a completed application form for permission to measure and transfer custody of liquid hydrocarbons by use of methods other than customary gauge tanks along with the requisite fee;
- 2. a diagrammatic sketch of the mechanical installation to be used along with a detailed explanation of the flow of liquid hydrocarbons, indicating locations of locking devices and seals to provide assurance against or evidence of tampering;
- 3. a cosigned statement by producer and carrier that, in their opinion, the transfer of liquid hydrocarbons in the manner proposed will provide reasonably accurate measurement and will not create inequities, and will afford the owner of any interest the opportunity to recover his just and equitable share of production. The statement incorporated in the application form will suffice for this purpose if signed by both parties, otherwise a separate statement is required;
- 4. a list of interested parties. This list shall include only those parties who have interests in the leases and/or units from which production is to be measured and custody transferred if approval is granted to the applicant and for which the applicant has no existing authority.
- C. Notice of the filing of an application to measure and transfer of custody of liquid hydrocarbons by use of methods other than customary gauge tanks shall be published in the Official Journal of the State of Louisiana (by the Office of Conservation) and mailed (by the applicant) to the interested parties with an affidavit of mailing submitted to the Office of Conservation. A copy of the application does not have to be mailed to all interested parties.
- D. No administrative approval for measurement and automatic custody transfer of liquid hydrocarbons will be granted, if, in the judgment of the commissioner, after considering all the data and information submitted, including any opposition expressed by interested parties, administrative approval is not warranted, or in the event any interested party files an application for a public hearing opposing the granting of authority for measurement and automatic custody transfer, together with the requisite hearing fee, within 10 days following the first publication of the notice of the application. The party seeking authority for

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measurement and automatic custody transfer may elect to file an application setting the matter for consideration at a public hearing if administrative approval is not granted.

E. Should the application for measurement and automatic custody transfer of liquid hydrocarbons be approved, the applicant shall provide a suitable means of testing each meter in order that its accuracy in operation can be proven, such testing to be done before or at the time the meter is initially installed and monthly thereafter or at such other times as the Commissioner of Conservation shall prescribe. The applicant shall retain the actual reports of such tests, and such reports shall be kept on file and available for inspection by any agent of the Office of Conservation or any interested party for a period of not less than three years.

F. This Statewide Order shall supersede Statewide Order No. 29-G, but shall be in addition to all other statewide orders, rules and regulations affecting the production and measurement of liquid hydrocarbons heretofore promulgated. To the extent of any conflict with such other statewide orders, rules and regulations, however, the provisions of this statewide order shall govern.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seg.

HISTORICAL NOTE: Adopted by the Department of Conservation, July 1959, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:758 (June 1993), amended LR 23:580 (May 1997).

Part XIX. Office of Conservation—General Operations Subpart 10. Statewide Order No. 29-H-1

Chapter 25. New Pools

§2501. Scope

A. Order terminating Statewide Order No. 29-H, effective May 24, 1960, which adopted the basis of determination of allowable oil production and complemental spacing regulations for oil wells in any new pool, as defined therein.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, May 24, 1960, amended January 1, 1980, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:767 (June 1993).

§2503. Order

- A. Statewide Order No. 29-H, effective May 24, 1960, be and is hereby terminated.
- B. The allowable assignment for each oil well, including those wells previously assigned allowables based on the provisions of Statewide Order No. 29-H, should be based on

the Statewide Crude Oil Depth Bracket Allowable Schedule adopted by Part XIX, Subpart 16, effective January 1, 1978.

- C. The spacing provision requirements for wells in pools developed or being developed under Statewide Order No. 29-H should henceforth be regulated in accordance with the requirements as set forth in Chapter XIX, Subpart 7.
- D. Any special order of the Office of Conservation which has adopted the spacing provision requirements of Statewide Order No. 29-H should be amended by reference and such provision requirements should be considered expunged coincident with the termination of Statewide Order No. 29-3H, and simultaneously therewith, the spacing provision requirements of Chapter XIX, Subpart 7 should be considered adopted.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, May 24, 1960, amended January 1, 1980, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:767 (June 1993).

Part XIX. Office of Conservation—General Operations

Subpart 11. Statewide Order No. 29-J

Chapter 27. Tubingless Completions

§2701. Scope

A. This order provides rules and regulations governing unprotested applications in the use of tubingless completions in the state of Louisiana.

 $\begin{tabular}{lllll} AUTHORITY NOTE: & Promulgated & in & accordance & with $R.S.30:4$ et seq. \end{tabular}$

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1961, amended May 1, 1963, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:777 (June 1993).

§2703. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

District Manager—the head of any one of the districts of the state of Louisiana under the Office of Conservation, and, as used, refers specifically to the manager within whose district the field or fields are located.

Office—the Office of Conservation of the state of Louisiana.

Tubingless Completion—the completion of any well so as to permit the passage of production from one separate underground source through one production casing set in the well.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, March 1, 1961, amended May 1, 1963, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:777 (June 1993).

§2705. Order

- A. From and after the effective date hereof, permission to complete and produce wells without the use of tubing may be obtained from the district manager without the necessity of a public hearing in the absence of protests, and upon strict compliance with the procedure set forth herein.
- B. No permission to complete and produce wells without the use of tubing will be granted without a public hearing unless and until the data and information required by the district manager shall have been filed in his office; said filings to be made in duplicate and to include the following information.

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8. If the answer			
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belief, the informat	ion contained	in this appl	ication is true and
correct.			
Signed			

Representing

Form-T.C.-1

- C. If an applicant for a tubingless completion installation is unable to obtain the approval of all of the other operators in the field then such an applicant must apply for a public hearing following the usual 10-day advertisement period after furnishing a list of all known parties, including operators and royalty owners, affected by the application, all in accordance with Title 30 of the Louisiana Revised Statutes of 1950, as amended.
- D. All approved applications shall be subject to the applicant's conforming with the following requirements.
- 1. Conductor Pipe. The use and removal of conductor pipe during the drilling of any oil or gas well shall be at the option of the operator. Conductor pipe is that pipe ordinarily used for the purpose of supporting unconsolidated surface deposits.
- 2. Surface and Intermediate Casing. All fresh water sands shall be cased off by the surface or first intermediate casing in accordance with provisions of Part XIX, Subpart 1.

3. Producing Oil String

- a. Producing or oil string is that casing used for the purpose of segregating the horizon from which production is obtained and affording a means of communication between such horizon and the surface.
- b. The producing string of casing shall consist of new or reconditioned casing tested at mill tent pressure or at 1.25 times the maximum anticipated bottomhole pressure. whichever is greater. The producing string of casing shall be set at a sufficient depth to cut off all gas formations above the oil-saturated horizon in which the well is to be completed. The position of the oil horizon shall be determined by coring, testing or electrical logging, or other satisfactory method, and the producing string of casing shall be bottomed and cemented at a point below the gas/oil contact, if determinable and practicable. The producing string of casing shall be of sufficient size and completed with the proper amount of tension so as to allow the running of conventional bottomhole pressure bombs, temperature survey units and all instruments of similar nature to the depth of the producing horizon.
- c. Cement shall be by the pump and plug method, or another method approved by the office. Sufficient cement shall be used to fill the calculated annular space behind the casing to such a point as, in the opinion of the district manager, local conditions require to protect the producing formations and all other oil and gas formations occurring above, but in every case, no less cement shall be used than the calculated amount necessary to fill the annular space to a point 500 feet above the top producing zone. The calculated amount of cement required shall be determined by a hole caliper survey or 1.5 times the theoretical volume required to fill this annular area.
- d. The amount of cement to be left remaining in the casing, until the requirements of §2705.D.3.e below have been met, shall be not less than 20 feet. This shall be accomplished through the use of a float collar or other approved or practicable means, unless a full-hole cementer, or its equivalent, is used.

- e. Cement shall be allowed to stand a minimum of 12 hours under pressure and a minimum total of 24 hours before initiating test or drilling plug in the producing or oil string. *Under pressure* is complied with if one or more float valves are employed and are shown to be holding the cement in place, or when other means of holding pressure are used. When an operator elects to perforate and squeeze or to cement around the shoe, he may proceed with such work after 12 hours have elapsed after placing the first cement.
- f. Before drilling the plug in the producing string of casing in wells drilled to 3,000 feet or less, the casing shall be tested with a pressure equivalent to 1,500 psi surface pressure applied with water in the casing, and in wells drilled deeper than 3,000 feet, the casing shall be tested with a pressure equivalent to 3,000 psi surface pressure applied with water in the casing. If, at the end of 30 minutes, the pressure gauge shows a drop of 10 percent of the test pressure or more, the operator shall be required to take such corrective measures as will insure that the producing string of casing is so set and cemented that it will hold said pressure for 30 minutes without a drop of more than 10 percent of the test pressure on the gauge.
- g. If the commissioner's agent is not present at the time designated by the operator for inspection of the casing tests of the producing string, the operator shall have such tests witnessed, preferably by an offset operator. An affidavit of the test, on the form prescribed by the Office of Conservation, signed by the operator and witness, shall be furnished to the district office of the Office of Conservation shown that the test conformed satisfactorily to the above mentioned regulations before proceeding with the completion. If test is satisfactory, normal operations may be resumed immediately.
- h. If the test is unsatisfactory, the operator shall not proceed with the completion of the well until a satisfactory test has been obtained.
- i. A temperature survey shall be run in the producing string prior to perforating if returns were lost during cementing or unusual circumstances were noted during the primary cementing operation to assure all interested parties that the cement has been displaced a sufficient height outside the producing casing.
- j. If a kill string is recommended by the district manager for the prevention of underground waste and the operator does not concur, such requirement pertaining to the installation of a kill string shall be resolved by the conservation commissioner and his staff after due consideration and review. The conservation commissioner and his staff shall also determine the minimum setting depth, size, and quality of the kill string, if required.
- k. No permit to make a tubingless completion in a corrosive or extreme pressure (gradient in excess of 0.5 psi per foot of depth or surface tubing pressure in excess of 4,500 psig) field shall be granted unless preventive measures for the corrosion or extreme pressure problems have been resolved and approved by the district manager.

E. This order shall be cumulative of and in addition to all Statewide Orders, rules and regulations affecting the drilling and production of gas and/or liquid hydrocarbons heretofore promulgated, and when anything in this order is in conflict therewith, then the provisions of this order shall govern. In case of conflict between this order and any special orders issued on specific fields, said special orders on specific fields shall govern.

AUTHORITY NOTE: Promulgated in accordance with R.S.30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation March 1, 1961, amended May 1, 1963, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:777 (June 1993).

Part XIX. Office of Conservation—General Operations Subpart 12. Statewide Order No. 29-K-1

Chapter 29. Substitute Unit Wells

§2901. Scope

A. This order provides rules and regulations governing the unprotested applications for designation of substitute unit wells.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, May 4, 1964, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:775 (June 1993), amended LR 21:1085 (October 1995).

§2903. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

Commissioner—the Commissioner of Conservation of the state of Louisiana.

District Manager—the manager of any one of the districts of the state of Louisiana under the Office of Conservation, and, as used, refers specifically to the manager within whose district the field or fields affected by the special order, as hereinafter defined, are located.

Interested Party—any person, as person is defined in Title 30 of the R.S. of 1950, who is known to the applicant after diligent search to own an interest in the unit affected by the application.

Legal Location—any location which is in accordance with applicable special and statewide orders.

Special Order—any order of the commissioner and any amendments or supplements thereto which created the unit for which the designation of a substitute unit well is requested.

Substitute Unit Well—any well already drilled to, or to be drilled to, completed or recompleted in the unitized sand which in the interest of good conservation practices should be designated to take the place of and become the unit well.

Unit—any drilling unit or units created by order of the commissioner.

Unitized Sand—the sand covered by the special order.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, May 4, 1964, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:775 (June 1993), amended LR 21:1085 (October 1995).

§2905. Order

- A. On and after the effective date hereof the commissioner may designate by supplemental order a substitute unit well at a legal location for any unit without the necessity of a public hearing upon proper showing that such substitute unit well is desirable and in the interest of sound conservation and that the location thereof complies in all respects with applicable special and statewide orders.
- B. Future applications after the effective date hereof for the designation of a substitute unit well at a legal location shall be made to the commissioner with copy to the district manager and to interested parties and such application shall include the following:
- 1. statement of reason explaining the need or desire for the designation of the substitute unit well;
- 2. plat showing the unit, the unit well and the location of the proposed substitute unit well, with particular reference to the distance to unit boundaries and other wells drilling to, completed in, or permitted for the Unitized Sand;
- 3. name of sand, field and parish where the unit is located;
 - 4. name of the operator of the unit;
- 5. the number of the order or orders establishing the unit and the name of the unit, including the number or letter designation of the unit;
- 6. the plat attached to the application should not exceed 16 inches by 22 inches;
- 7. an application fee as established by LAC 43:XIX.201 et seq. (Statewide Order Number 29-Q-1) or successor regulation.
- C. Notice of the filing of the application for designation of a substitute unit well shall be published in the Official Journal of the state of Louisiana.
- D. Based on the application the commissioner may, at any time after 10 days following the date on which the notice is published, issue a supplemental order designating a substitute unit well as proposed unless prior thereto application for public hearing opposing such designation is filed with the required hearing fee and in compliance with the LAC 43:XIX.3901 et seq. (rules of procedure).
- E. This order supersedes Statewide Order Number 29-K and shall be effective on and after October 20, 1995.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Conservation, May 4, 1964, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:775 (June 1993), amended LR 21:1085 (October 1995).

Part XIX. Office of Conservation—General Operations Subpart 13. Statewide Order No. 29-L-3

Chapter 31. Termination of Units

§3101. Scope

A. This order establishes rules and regulations for termination of any unit established by the Commissioner of Conservation pursuant to the authority of Title 30 of the Revised Statutes of 1950.

AUTHORITY NOTE: Promulgated in accordance with RS. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 15:741 (September 1989), repromulgated LR 19:776 (June 1993), amended LR 21:1083 (October 1995), LR 30:255 (February 2004), repromulgated LR 30:437 (March 2004).

§3103. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meaning when found in this order.

District Manager—the manager of any one of the districts of the state of Louisiana under the Office of Conservation, and refers specifically to the manager within whose district the pool for which any unit(s) are sought to be terminated are located.

Interested Party—any person, as person is defined in Title 30 of the Revised Statutes of 1950, who owns an interest in any unit(s) sought to be terminated.

Pool—an underground reservoir containing a common accumulation of crude petroleum or natural gas or both. Each zone of a general structure which is completely separated from any other zone in the structure is covered by the term *pool*.

Unit—any unit(s), whether one or more, established for a particular pool, by order of the Commissioner of Conservation pursuant to authority of Subsection B of Section 9 or Subsection B or C of Section 5 of Title 30 of the Revised Statutes of 1950.

Well—all wells drilled within the confines of any unit(s) sought to be terminated.

AUTHORITY NOTE: Promulgated in accordance with RS.30:4 et sea.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 15:741 (September 1989), repromulgated LR 19:776 (June 1993), amended LR 21:1083 (October 1995), LR 30:255 (February 2004), repromulgated LR 30:437 (March 2004).

§3105. Order

- A. Termination of All Existing Units for a Pool
- 1. On and after the effective date hereof, a supplemental order terminating all existing units established by the commissioner for a pool may be issued after written application and upon proper showing in the manner provided herein, and in the absence of protest without the necessity of a public hearing, when with respect to the pool for which the unit was established, a period of one year and 90 days has elapsed without:
 - a. production from the pool; and
- b. the existence of a well proven capable of producing from the pool; and
- c. drilling, reworking, recompletion, deepening or plugging back operations having been conducted on a well to secure or restore production from the pool.
- 2. Each application for unit termination shall be filed with the commissioner with a copy to the district manager and each interested party. Interested parties need not be furnished information described in §3105.A.2.b, d and e. The application shall include the following:
- a. a plat showing all existing units established for the pool, with each well located thereon, together with order number(s) and effective date of the order(s) of the commissioner establishing said units. Each well shall be identified on such plat by operator of record, serial number and well name and number or by reference to an appropriate attachment;
- b. a signed statement indicating the status of each well. Should there exist a well which has not been plugged and abandoned in accordance with LAC 43:XIX.137, sufficient geological, engineering, or other data with detailed explanation thereof to clearly demonstrate that said well is not capable of producing from the pool;
- c. a signed statement indicating that with respect to the pool for which the unit was established, to the best of applicant's knowledge, a period of one year and 90 days has elapsed without:
 - i. production from the pool; and
- ii. the existence of a well proven capable of producing from the pool; and
- iii. drilling, reworking, recompletion, deepening or plugging back operations having been conducted on a well to secure or restore production from the pool;

- d. a list of all interested parties identified by the applicant after reasonable search to whom a copy of the application has been sent;
- e. an application fee as established by LAC 43:XIX.201 et seq.
- 3. Notice of the filing of the application of unit termination shall be published in the official journal of the state of Louisiana giving notice that unless a written protest is filed with the commissioner within the 30-day period from the date of publication of notice, the commissioner may issue a supplemental order for such unit termination. In the event written objection is filed within said 30-day period, the applicant may apply for a public hearing for consideration of the application.
- 4. In the event that production from the pool is subsequently reestablished from an existing well which was deemed not capable of producing from the pool as of the effective date of unit termination, the operator of record of such well shall immediately apply to the commissioner for a public hearing, after 30-day legal notice, to consider evidence concerning whether the previously existing unit on which the well is located should be reestablished for such well.

B. Termination of Any Existing Unit for a Pool

- 1. On and after the effective date hereof, a supplemental order terminating any existing unit(s) established by the commissioner for a pool may be issued after written application and upon proper showing in the manner provided herein, and in the absence of protest without the necessity of a public hearing, when with respect to the unit(s) to be terminated, each of the following apply as of the date the application for unit termination is filed with the commissioner:
- a. a period of five years has elapsed without any production from the unit(s); and
- b. there is no well located on the unit(s) which is capable of producing from the pool for which the unit(s) was established; and
- c. a period of one year and 90 days has elapsed without any drilling, reworking, recompletion, deepening or plugging back operations having been conducted on a well located on the unit(s) to be terminated in an attempt to secure or restore production from the pool for which the unit(s) was established.
- 2. Each application for unit termination shall be filed with the commissioner with a copy to the district manager and each interested party. Interested parties need not be furnished information described in §3105.B.2.b, d and e. The application shall include the following:
- a. a plat showing the existing unit(s) to be terminated, with each well located thereon, together with order number and effective date of the order of the commissioner establishing said unit(s). Each well shall be identified on such plat by operator of record, serial number and well name and number or by reference to an appropriate attachment:

- b. a signed statement indicating the status of each well. Should there exist a well which has not been plugged and abandoned in accordance with LAC 43:XIX.137, sufficient geological, engineering, or other data with detailed explanation thereof to clearly demonstrate that said well located on the unit(s) is not capable of producing from the pool for which the unit(s) was created;
- c. a signed statement indicating that with respect to the unit(s) to be terminated, to the best of applicant's knowledge, each of the following apply as of the date the application for unit termination is filed with the commissioner:
- i. a period of five years has elapsed without any production from the unit(s); and
- ii. there is no well located on the unit(s) to be terminated which is capable of producing from the pool for which the unit(s) was established; and
- iii. a period of one year and 90 days has elapsed without any drilling, reworking, recompletion, deepening or plugging back operations having been conducted on a well located on the unit(s) in an attempt to secure or restore production from the pool for which the unit(s) was established; and
- iv. there is no unexpired drilling permit for the drilling of a new well on the unit(s) to be terminated to a depth which would penetrate the pool for which the unit(s) was established:
- d. a list of all interested parties identified by the applicant after reasonable search to whom a copy of the application has been sent;
- e. an application fee as established by LAC 43:XIX.201 et seq.
- 3. Notice of the filing of the application of unit termination shall be published in the official journal of the state of Louisiana giving notice that unless a written protest is filed with the commissioner within the 30-day period from the date of publication of notice, the commissioner may issue a supplemental order for such unit termination. In the event written objection is filed within said 30-day period, the applicant may apply for a public hearing for consideration of the application.
- C. The effective date of any supplemental order issued hereunder can not be prior to the expiration of the legal advertisement period, reference §3105.A.3 and §3105.B.3 hereof. Consequently, any activity described in §3105.A.1 and §3105.B.1 hereof, occurring between the date of the signed statement, reference §3105.A.2.c and §3105.B.2.c hereof and the expiration of the legal advertisement period, shall result in application denial.
- D. Any supplemental order issued hereunder approving the application terminating any unit(s) created for the pool shall be filed for record as provided in Section 11.1 of Title 30 of the Revised Statutes of 1950.

E. This order supersedes Statewide Order Number 29-L-2 and shall be effective on and after February 20, 2004.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 15:741 (September 1989), amended LR 19:776 (June 1993), repromulgated LR 19:1030 (August 1993), amended LR 21:1084 (October 1995), LR 30:255 (February 2004), repromulgated LR 30:437 (March 2004).

Part XIX. Office of Conservation—General Operations Subpart 14. Statewide Order No. 31-A

Chapter 33. Record Keeping and Report Filing

§3301. Scope

A. An order providing rules and regulations governing and requiring the keeping of records and the filing of reports respecting the producing, taking, transporting, processing, cycling, and otherwise handling of natural gas within the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:773 (June 1993).

§3303. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

Field, Month, and Calendar Month—shall have the meaning prescribed for each of said words, respectively, in Part XIX, Subpart 3, §903 promulgated by the commissioner of conservation on December 16, 1940.

Gas Gatherer—anyone who gathers gas other than his own in a field or from several fields for delivery to a transporter or gas processing plant.

Person, Producer, Gas, and Products—shall have the meaning prescribed for each of said words as defined in R.S. 30·3

Stripper Well—shall have the ordinary meaning as that term is generally understood in the oil and gas industry, but shall not be construed to include naturally flowing or artificial gas-lift oil wells.

Transporter—shall have the ordinary meaning as that term is generally understood in the oil and gas industry, but shall not be construed to include producers operating field gathering systems and direct transportation lines to ultimate consumers.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:773 (June 1993).

§3305. Applicability

A. The provisions of this order shall extend and apply to all gas produced from oil wells or gas wells within the state of Louisiana, excepting gas vented from stripper oil wells.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:773 (June 1993).

§3307. Forms R-5-P and R-5-T

- A. The Monthly Producer's Natural Gas Report Form R-5-P or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. The Monthly Transporter's Natural Gas Report Form R-5-T or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- C. All gas produced from oil wells and from gas wells within the state of Louisiana, excepting gas vented from stripper oil wells, shall be reported monthly on said Report Forms R-5-P or most current revision thereof and R-5-T or most current revision thereof. Every producer shall make Report Form R-5-P or most current revision thereof. Where, however, gas from any well is taken by any person other than the producer, the producer may authorize such person to make the report in his name, which report shall include all gas produced from said well. Every transporter shall make Report Form R-5-T or most current revision thereof. The producer or agent of the producer, and the transporter thus required to report shall execute under oath and file in the manner hereafter directed on or before the last day of each calendar month, Report Form R-5-P or and R-5-T respectively, or most current revision thereof, setting forth fully the data and information indicated by such forms, and shall be complete as to data covering the calendar month next preceding the date of filing. Such reports for each month shall be prepared and filed in accordance with the instructions on the forms. The first report due under this Order shall be for the calendar month of January, 1942, which shall be filed on or before the last day of February, 1942.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:773 (June 1993).

§3309. Form R-6

- A. The Monthly Gasoline and/or Cycling Plant Report Form R-6 or most current revision thereof, is hereby adopted and made a part of this Order by reference.
- B. Each operator of a gasoline plant, cycling plant, or any other plant at which gasoline, butane, propane, condensate, kerosene, oil or other liquid products are extracted from natural gas within the state of Louisiana, shall furnish for each calendar month a Monthly Gasoline and/or Cycling Plant Report Form R-6 or most current revision thereof, containing the information indicated by such form respecting natural gas and products involved in the operation of each plant during each month. Such report for each month shall be prepared and filed according to instructions on the form on or before the last day of the next succeeding month.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:774 (June 1993).

§3311. Affidavits

A. All reports provided for in this order shall be verified by affidavit in the form or forms indicated, and any reports not so verified shall not be taken as filed in compliance with this order.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:774 (June 1993).

§3313. Record Keeping

A. All persons required by the provisions of this order to keep the reports provided for herein shall make and keep appropriate books and records covering their operations in Louisiana from which they may be able to make and substantiate such reports.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:774 (June 1993).

§3315. Gas Gatherer

- A. Gas gatherer, as that term is defined in §3303 above, shall report the amounts of gas handled and disposed of on Office of Conservation Monthly Producer's Natural Gas Report, Form R-5-P or most current revision thereof. The gas which has been produced in the field shall be reported on Form R-5-P or most current revision thereof under the section of the report entitled Production. The gas which has been gathered in the same field along with gas which has been gathered in nearby fields and transported to that field shall be reported on the same Form R-5-P or most current revision thereof under the section entitled Acquisitions. Indicated in this section shall be the company from whom the gas was received, the field from which the gas was produced and the amount of gas received.
- B. In the event the gatherer has produced no gas in the field from which he is gathering, then he shall indicate in the production section of Form R-5-P or most current revision thereof that he has no gas production. His acquisitions in that field shall be listed in the acquisitions section.
- C. The total gas production of the gas gatherer shall then be added to the total acquisitions.
- D. He shall then indicate in the disposition section of Form R-5-P or most current revision thereof, the manner in which the total amount of gas produced and acquired was disposed.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:774 (June 1993).

§3317. Effect on Overall Authority of the Commissioner of Conservation

A. This order shall not be taken or construed to limit or restrict the authority of the Commissioner of Conservation to require the furnishing of such additional reports, data or other information relative to the production and processing of gas in this state as may appear to him to be necessary or desirable, either generally or specially, for the prevention of waste and the conservation of natural resources in this state; nor to limit or restrict the authority of the Commissioner of Conservation to waive the filing of any report or reports otherwise required hereunder in any special instance wherein the Commissioner of Conservation finds that such waiver is necessary to prevent undue hardship or imposition.

AUTHORITY NOTE: Promulgated in accordance with Act 157 of the Legislative Session of 1940.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 7, 1941, amended January 1, 1942, December 1, 1955, April 17, 1968, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:774 (June 1993).

Part XIX. Office of Conservation—General Operations Subpart 15. Statewide Order No. 45-I-A

Chapter 35. Gas/Oil Ratios, Allowables and Venting of Natural Gas

§3501. Scope

A. This Statewide Order provides special rules and regulations governing gas/oil ratios, allowables, and the venting of natural gas.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:581 (May 1997).

§3503. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meaning when found in this Statewide Order.

Base Gas/Oil Ratio—amount of natural gas, in cubic feet, which may be produced with one barrel of oil from a well recognized by the Office of Conservation as an oil well without reduction of the base oil allowable.

Base Oil Allowable—amount of oil, in barrels per day, which may be produced from a well recognized by the Office of Conservation as an oil well before application of the base gas/oil ratio.

Commissioner—the Commissioner of Conservation of the state of Louisiana.

District Manager—the head of any one of the districts of the state of Louisiana under the Office of Conservation, and specifically the manager within whose district the well affected by this Statewide Order is located.

Horizontal Well—well with the wellbore drilled laterally at an angle of at least 80 degrees to the vertical and with a horizontal displacement of at least 50 feet in the pool in which the well is completed for production, measured from the initial point of penetration into such pool.

Oil Allowable—amount of oil authorized to be produced by the Office of Conservation from a well recognized by the Office of Conservation as an oil well.

Point of Delivery—point at which gas is vented to the atmosphere, whether from one or more wells or at any type of production facility.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4 \ \text{et seq}$.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December

1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:581 (May 1997).

§3505. Base Gas/Oil Ratio and Allowables

A. The base gas/oil ratio for a well recognized by the Office of Conservation as an oil well is hereby fixed at 2,000 cubic feet of natural gas per barrel of oil (2000/1). Any well recognized by the Office of Conservation as an oil well which has a gas/oil ratio of 2000/1 or below will be allowed to produce its base oil allowable without reduction. Any well recognized by the Office of Conservation as an oil well which has a gas/oil ratio exceeding 2000/1 and from which the operator cannot use or sell the gas will have its base oil allowable reduced by assigning to such well an oil allowable determined by multiplying the base oil allowable by the base gas/oil ratio and dividing by the gas/oil ratio of the well.

B. If the operator can use or sell the gas, the allowable which shall be granted to a well which produces oil with a gas/oil ratio in excess of 2000/1, or to a well which produces hydrocarbons from the gas cap of an oil pool, shall be equivalent volumetrically to the quantity of hydrocarbons a well in the same pool would be allowed to produce if it were producing oil with a gas/oil ratio of 2000/1, each computed at reservoir conditions based on available data; provided that reasonable estimates of reservoir conditions shall be used if actual reservoir conditions cannot be determined from available data. Such allowables shall be calculated as follows

1. Any well recognized by the Office of Conservation as an oil well which has a gas/oil ratio exceeding 2000/1 will have its base oil allowable reduced by assigning to such well an oil allowable determined by the following formula:

where:

 Q_0 = current depth bracket oil allowable for one well

$$Q_{o}(2000+)=Q_{o}\left[\frac{V(R_{p}-R_{o})+B}{V(R_{i}-R_{o})+B}\right]$$

when producing gas-oil ratio is less than 2000:1

 $Q_o(2000+)$ = oil allowable for one well when producing gasoil ratio is greater than 2000:1

V = barrels of space occupied by one std. Mcf of gas at reservoir conditions (res. bbls. per MSCF)

 R_p = permissible gas-oil ratio for an oil well (2.0 MSCF/STB)

R_i = producing gas-oil ratio of wells for which the allowable is being calculated (MSCF/STB)

 R_o = solution gas-oil ratio at the current bottomhole pressure (MSCF/bbl.)

B = volume occupied by one barrel of stock tank oil and its solution gas at the current reservoir pressure (Res. bbl. per STB) 2. Any well recognized by the Office of Conservation as a gas well and which is determined by the Office of Conservation to be producing from the gas cap of an oil pool will be assigned a volumetric gas allowable determined by application of the following formula:

$$Q_{s} = A_{g} \frac{Q_{o}}{A_{o}} \left[\frac{V(R_{p} - R_{o}) + B}{V} \right]$$

where:

Q_g = gas well allowable (MSCF per day)

 A_0 = number acres in oil unit

Ag = number acres in gas unit

Q_o = current depth bracket oil allowable for one well when producing gas-oil ratio is less than 2000:1

 R_o = solution gas-oil ratio at the current bottomhole pressure (MSCF/bbl.)

B = volume occupied by one barrel of stock tank oil and its solution gas at the current reservoir pressure (Res. bbl. per STB)

V = barrels of space occupied by one std. Mcf of gas at reservoir conditions (res. bbls. per MSCF)

 R_p = permissible gas-oil ratio for an oil well (2.0 MSCF/STB)

- C. The gas/oil ratios of wells which have been assigned an oil allowable based on a gas/oil ratio of 2000/1 or below shall be determined by testing at as close as practical the allowable rate. The gas/oil ratios of wells which are known to have high gas/oil ratios >2000/1 shall be determined by testing at the rate determined by the operator and the district manager as the most efficient rate. The gas/oil ratio for a gas lift well shall be calculated by subtracting the input gas from the output gas and dividing by the oil produced.
- D. Any flowing oil well which produces oil with excessive amount of salt water and has a gas/oil ratio exceeding 2000/1 shall not have its base oil allowable reduced by assigning a penalized allowable under §3505.A or a volumetric allowable under §3505.B hereof if to do so would reduce the base oil allowable for the well to such a figure that the well could not produce by natural flow. Requests for exemption of any such well from the penalized or volumetric allowable shall be made in writing to the district manager, accompanied by appropriate data to establish that the well qualifies for the requested exemption, and such request may be granted by the district manager, upon receipt of such data, without the necessity of a public hearing.
- E. The operator of any well which is subject to a volumetric allowable restriction under Subsection B of this Section this may be granted an exemption from such restriction if such operator can use or sell the natural gas produced from such well and if, pursuant to written application to and subsequent written approval by the appropriate district manager, it is established that:
- 1. the well is the only well capable of producing from the pool; or
- 2. the productive limits of the pool underlies a single lease or voluntary unit; or
- 3. all persons owning interests in the pool agree in writing, to the requested exemption from the volumetric allowable restriction.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:581 (May 1997).

§3507. Venting of Gas

A. The venting of natural gas from any well producing in the state of Louisiana is hereby expressly prohibited except in those instances where the Office of Conservation finds, upon written application, that such prohibition would result in an economic hardship on the operator of the well, lease or production facility from which the gas is proposed to be vented; provided, however, that no such economic hardship can be found in the case where the current market value, at the point of delivery, of the gas proposed to be vented exceeds the cost involved in making such gas available to a market. Such applications shall be filed with the district office and approval thereof will be at the discretion of the district manager.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:582 (May 1997).

§3509. Exceptions and Hearings

- A. These rules and regulations shall govern the production of oil and gas or both in the state of Louisiana, except:
- 1. where the production of oil and gas or both is regulated by special field orders; and
 - 2. in the recognized stripper areas; and
- production of oil and gas or both from horizontal wells.
- B. Other exceptions to the provisions of this Statewide Order which are found to be proper and in the interest of conservation, the prevention of waste, and the protection of the rights of all persons owning interests in the pool shall be granted only after public hearing based on legal notice.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:582 (May 1997).

§3511. Violations

A. Unless specifically prohibited by the commissioner or his authorized staff, the venting of gas due to unavoidable situations will not be considered a violation of this Statewide Order. However, any venting which contradicts the spirit or intent of this Statewide Order shall be a violation hereof.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 20, 1943, amended January 1, 1966, December 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 23:583 (May 1997).

Part XIX. Office of Conservation—General Operations Subpart 16. Statewide Order No. 151-A-2

Chapter 37. Statewide Crude Oil Depth Bracket Allowable Schedule

§3701. Scope

A. Order establishing a Statewide Crude Oil Depth Bracket Allowable Schedule for Oil Wells in addition to providing additional allowable incentive to horizontal oil wells.

AUTHORITY NOTE: Promulgated in accordance with Act 157

HISTORICAL NOTE: Adopted by the Department of Conservation, September 24, 1948, amended June 4, 1950, January 1, 1951, February 1, 1951, January 31, 1952, May 19, 1952, July 1, 1957, July 1, 1959, January 1, 1960, January 1, 1961, July 18, 1961, October 1, 1962, March 1, 1967, January 1, 1967, November 1, 1967, January 1, 1978; amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1126 (October 1994).

§3703. Definitions

A. Unless the context otherwise requires, the words defined in this Section shall have the following meanings when found in this order.

Horizontal Oil Well—a well with the wellbore drilled laterally at an angle of at least 80 degrees to the vertical and with a horizontal displacement of at least 50 feet in the pool in which the well is completed for production, measured from the initial point of penetration into such pool.

Maximum Efficient Rate (MER)—the maximum sustainable daily oil withdrawal rate from a reservoir which will permit economic development and depletion without causing waste.

AUTHORITY NOTE: Promulgated in accordance with Act 157.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 24, 1948, amended June 4, 1950, January 1, 1951, February 1, 1951, January 31, 1952, May 19, 1952, July 1, 1957, July 1, 1959, January 1, 1960, January 1, 1961, July 18, 1961, October 1, 1962, March 1, 1967, January 1, 1967, November 1, 1967, January 1, 1978; amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1126 (October 1994).

§3705. Allowable Schedule for Oil Wells Other than Horizontal Wells

A. The Statewide Crude Oil Depth Bracket Allowable Schedule for oil wells other than horizontal wells is listed below.

Measured Depths	Statewide Allowable (BPD)
0 - 2000	200
2 - 3000	300
3 - 4000	400
4 - 5000	500
5 - 6000	600
6 - 7000	700
7 - 8000	800
8 - 9000	900
9 - 10000	1000
10 - 11000	1100
11 - 12000	1200
12 - 13000	1300
13 - 14000	1400
14 - 15000	1500
15 - 16000	1600
16 - 17000	1700
17 - 18000	1800
18 - 19000	1900
19 - 20000	2000
20 - 21000	2100
21 - 22000	2200
etc.	etc.

B. The measured depth of the deepest perforation in the pool shall be used in determining the applicable depth bracket allowable for all wells in the pool.

AUTHORITY NOTE: Promulgated in accordance with Act 157.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 24, 1948, amended June 4, 1950, January 1, 1951, February 1, 1951, January 31, 1952, May 19, 1952, July 1, 1957, July 1, 1959, January 1, 1960, January 1, 1961, July 18, 1961, October 1, 1962, March 1, 1967, January 1, 1967, November 1, 1967, January 1, 1978; amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1127 (October 1994).

§3707. Horizontal Oil Well Allowables

- A. Subject to §3707.B and C, the allowable for each horizontal oil well shall be its maximum efficient rate.
- B. Allowables assigned to units in competitive reservoirs shall be subject to adjustment if needed to prevent adverse drainage or to protect correlative rights after public hearing based on 10 days legal notice.

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C. A unit in a competitive reservoir containing multiple unit wells, at least one of which is a horizontal well, shall be assigned an allowable equal to the greater of the maximum efficient rate for the horizontal well or the applicable depth bracket.

AUTHORITY NOTE: Promulgated in accordance with Act 157.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 24, 1948, amended June 4, 1950, January 1, 1951, February 1, 1951, January 31, 1952, May 19, 1952, July 1, 1957, July 1, 1959, January 1, 1960, January 1, 1961, July 18, 1961, October 1, 1962, March 1, 1967, January 1, 1967, November 1, 1967, January 1, 1978; amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1127 (October 1994).

§3709. Effective Date

A. This order supersedes Statewide Order Number 151-A-1 and shall be effective upon publication in the *Louisiana Register*.

AUTHORITY NOTE: Promulgated in accordance with Act 157.

HISTORICAL NOTE: Adopted by the Department of Conservation, September 24, 1948, amended June 4, 1950, January 1, 1951, February 1, 1951, January 31, 1952, May 19, 1952, July 1, 1957, July 1, 1959, January 1, 1960, January 1, 1961, July 18, 1961, October 1, 1962, March 1, 1967, January 1, 1967, November 1, 1967, January 1, 1978; amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 20:1127 (October 1994).

Part XIX. Office of Conservation—General Operations

Subpart 17. Procedures for Hearings and Unit and Survey Plat Requirements

Chapter 39. Hearings

§3901. Scope

A. This order provides rules of procedure for conducting hearings before the Commissioner of Conservation.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:759 (June 1993).

§3903. Definitions

A. The words defined herein shall have the following meanings when used in these rules. All other words so used and not herein defined shall have their usual meanings unless specially defined in Title 30 of Louisiana Revised Statutes of 1950.

Date—the postmarked date of a letter or the transmittal date of a telegraphic or wireless communication.

District Manager—the manager of any one of the districts of the state of Louisiana under the Office of Conservation, and, as used, refers specifically to the manager within whose district the field or fields affected by the subject matter of the proposed hearing are located.

Interest—shall not mean the rights of a top lessee or any other reversionary right.

Interested Owner—any owner as owner is defined in Title 30 of Louisiana Revised Statutes of 1950, who is known to the applicant after reasonable search to presently own an interest within the area of, or proximate to, the tracts directly affected by the application.

Interested Party—any person as person is defined in Title 30 of Louisiana Revised Statutes of 1950, other than an interested owner or a represented party as defined herein, who presently owns an interest within the area of, or proximate to, the tracts directly affected by the application.

Pertinent Data—with respect to any unit proceedings, all basic factual information available from wells drilled or drilling which can reasonably be utilized in determining the unit configuration, including but not limited to:

- a. electric logs, porosity logs and dipmeter logs;
- b. tests, completion and production data; and
- c. core data. All data that will be employed at a hearing shall be considered pertinent data.

Represented Party—any person as person is defined in Title 30 of Louisiana Revised Statutes of 1950, who is known to the applicant after reasonable search to presently own an interest within the area of, or proximate to, the tracts directly affected by the application and who is also known to the applicant to have either a consultant or attorney representing him in conservation matters.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:759 (June 1993).

§3905. Applicability

A. These rules of procedure shall be applicable to all hearing applications which require 30 days notice as set forth in Section 6B of Chapter 1 of Title 30 of the Louisiana Revised Statutes of 1950, including applications relating to revisions of poolwide units created under Section 5C (Act 441 of 1960), provided that, except for the notice provisions contained in §3915.A.1, 2 and 3 herein, and except to the extent provided in §3921 herein, these rules of procedure shall not apply to applications relating to the initial creation of poolwide units under Section 5C (Act 441 of 1960) of Chapter 1 of Title 30 of the Louisiana Revised Statutes of 1950.

- B. If the application relates to the initial creation of poolwide units under Section 5C (Act 441 of 1960), a copy of same shall be furnished each interested owner and represented party. If the required 75 percent in interest of owners and royalty owners in the reservoir shall have failed to join in the agreement covering the plan and terms of unit operation by the fifteenth day prior to the date of hearing, the applicant shall secure cancellation of the hearing and shall notify all interested owners, represented parties, and interested parties of the cancellation.
- C. To the extent practicable, these rules of procedure also shall apply to hearing applications which require 10 days notice. The provisions in §§3907, 3911, 3913, 3915, 3917, 3919, 3921 and 3933, concerning pre-application notice, notice of opposition, pre-application conferences, other conferences, proposed units, unit revisions, counterplans and matters which are not deemed practicable for hearing applications which require 10 days notice shall not apply. The posting and publication of a copy of the notice of hearing shall be accomplished as soon as practicable after such notice has been issued by the commissioner. Any interested owner or represented party

who has opposition to the application shall give immediate notice thereof to the commissioner, district manager and the applicant.

D. These rules of procedure shall in no way alter or change the right of any interested person, as provided in Paragraph F, Section 6 of Chapter 1 of Title 30 of the La. R.S. of 1950, to have the Commissioner of Conservation call a hearing for the purpose of taking action in respect to a matter within the jurisdiction of the commissioner, nor the requirement that the commissioner, upon receiving the request, promptly call a hearing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et sea

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:760 (June 1993).

§3907. Pre-Application Notice

- A. Except as provided by §3917, any person intending to apply for a hearing, prior to filing application, shall send a notice outlining the proposal to the commissioner (in duplicate) with a copy to the district manager and to each interested owner and represented party. Interested owners and represented parties need not be furnished the list described in §3907.B.1, but the applicant upon request shall furnish a copy of said list to the requesting party.
- B. Each pre-application notice shall include or be accompanied by the following:
- 1. a list of the names and addresses of all interested owners and represented parties to whom it is being sent;
- 2. a statement that a reasonable effort has been made to determine to whom the notices as required by this rule must be sent;
- 3. an explanation of the nature of the proposal and a copy of a unit plat for each sand, if units are involved, prepared in accordance with all applicable memoranda and the procedure for assigning nomenclature of LAC 43:XIX.103, with any geological bases for any unit boundary labeled thereon. A reasonable effort shall be made to prepare the plat in sufficient detail to enable affected parties to determine the location of their lands;
- 4. a day, time and place for a conference which need be held only if notice of a desire to confer with respect to the application is given as herein after provided. Any such conference shall be held within the state of Louisiana (unless mutually agreed otherwise among all interested owners and represented parties) in a city reasonably convenient to the persons involved and shall be scheduled for not less than 20 calendar days following the date of the pre-application notice;
- 5. a definition of the sand proposed for unitization with such sand defined in each reservoir thereof by reference to well log measurements.
- C. If an applicant has proof acceptable to the commissioner that there is no necessity to confer about the proposal because there is no indication of opposition from

any person to whom the pre-application notice must be sent, he may immediately proceed to file his application and need not schedule a conference nor comply with §3915.A.1 and 4 hereof

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:760 (June 1993), repromulgated LR 19:1030 (August 1993).

§3909. Release of Pertinent Data

- A. Pertinent data shall be made available to interested owners and represented parties sufficiently in advance of any conference to allow a reasonable time for review and interpretation thereof prior to such conference.
- B. Reference to source, including commercial outlets, from which or whom such data can be obtained, at the cost of the requesting party, shall be included in notices and applications required by these rules.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:760 (June 1993).

§3911. Opposition—Pre-Application Notice

A. If any interested owner or represented party desires to confer about the applicant's proposal as set forth in the pre-application notice, he shall, within 10 calendar days after the date of said notice, advise the applicant of his desire to confer, and the applicant shall, within 15 calendar days after the date of the pre-application notice, advise in writing the commissioner, the district manager and all other persons to whom the pre-application notice was sent that the conference will be held. Any interested owner and represented party may attend and participate in the conference even though not requesting it. If the applicant does not timely receive notice of a desire to confer from any party receiving the pre-application notice, he may immediately proceed to file his application.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:761 (June 1993).

§3913. Procedure for Conferences

- A. At any conference held pursuant to these rules, the applicant shall present the available and appropriate geological, engineering or other bases for his position supported by sufficient data and detail for the conferees to have reasonable opportunity to discuss and attempt to resolve their differences in good faith.
- B. Any opponent or party supporting the applicant, who has had an opportunity to study the matter and who has developed the geological, engineering or other bases for his

opposition or support, shall present his position in sufficient detail to permit the parties to attempt to resolve the differences in good faith.

- C. If, however, any opponent or party supporting the applicant is not prepared to discuss the geological, engineering or other bases for his opposition or support at the conference, he shall later comply with the provisions of §3915 or §3917 and §3921 hereof.
- D. At any conference held pursuant to these rules, any participant proposing to create or revise a unit or units shall exhibit a map or plat, reasonably prepared in sufficient size and detail to enable affected parties to determine the location of their lands.
- E. Conferences held pursuant to these rules are designed to promote an open exchange of views among the parties; therefore, any reference to discussions among the parties as to geological, engineering, or other bases for a party's position at said conferences shall not be admissible in evidence at any hearing. Tape recordings and transcriptions made at any such conference also shall not be admissible in evidence.
- F. Conference reports prepared pursuant to §§3915 and 3917 shall be limited to a statement of whether or not there is disagreement among the parties and shall contain no reference to individual geological, engineering or other opinions expressed at said conferences, but they shall indicate the issues that are likely to be controverted and the number of parties likely to present opposing plans.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:761 (June 1993).

§3915. Hearing Application

- A. The hearing application may be filed immediately after the pre-application conference or as otherwise provided in §§3907 and 3911 and shall be filed with the commissioner (in duplicate) with a copy to the district manager and to each interested owner and represented party. Interested owners and represented parties need not be furnished the lists described in §3915.A.1 and 2, but the applicant upon request shall furnish copies of said lists to the requesting party. In addition to outlining the purpose thereof, the application shall include or be accompanied by the following:
- 1. a list of the names and addresses of interested owners and represented parties notified, as required by §3907.B.1;
- 2. a list of the names and addresses of all interested parties who are known to the applicant after reasonable search. In addition to the publication of the legal notice by the commissioner in the official state journal, the applicant shall provide for posting of a copy of the legal notice of the hearing and unit plat or plats in a prominent place in the area affected and publication of a copy of the legal notice in a newspaper published in the vicinity or general area of the affected field at least 15 days before the hearing. The

- applicant shall mail copies of the legal notice to all interested owners, represented parties and interested parties and a copy of the unit plat or plats shall be included with the legal notice, if said parties have not already been furnished same. Evidence to establish posting, publishing and mailing shall be submitted at the hearing;
- 3. a statement that a reasonable effort has been made to obtain a complete list of interested parties, interested owners and represented parties;
- 4. a statement that a conference has or has not been held, including a brief report on the conference, if held, and a list of the parties in attendance;
- 5. a unit plat, if units are involved, prepared in accordance with all applicable memoranda and the procedure for assigning nomenclature of LAC 43:XIX.103, with any geological bases for any unit boundary labeled thereon and the other items required by statute or by the commissioner;
- 6. a definition of the sand proposed for unitization with such sand defined in each reservoir thereof by reference to well log measurements.
- B. A request for rules and regulations for more than one sand shall be considered a separate application for each sand and the commissioner shall be furnished an extra copy of the application for each additional sand affected thereby. An application fee for each sand shall be filed with the application as established by Part XIX, Subpart 2 or successor regulation.
- C. If, as a result of any conference, the applicant's proposal as set forth in a pre-application notice is revised, the revised proposal shall be explained in the application, and if units are involved and are revised, the revised unit plat shall be filed with the application.
- D. If the application does not change or alter the units as proposed in the pre-application notice, additional plats need not be furnished to interested owners and represented parties.
- E. If differences are not resolved or if any interested owner or represented party desires to oppose or support a proposal by the introduction of evidence at the hearing, then not less than 15 calendar days before the hearing, he must file with the commissioner and furnish to the district manager, the applicant and all persons who attended the pre-application conference his counterplan or supporting plan, including a plat of his proposed units, if units are involved, prepared in accordance with all applicable memoranda and the procedure for assigning nomenclature of LAC 43:XIX.103, with any geological bases for any unit boundary labeled thereon, accompanied by a letter explaining any points of difference with the applicant's plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:761 (June 1993), repromulgated LR 19:1030 (August 1993).

§3917. Waiver of Pre-Application Notice

- A. If circumstances indicate that the 20 day delay required by the pre-application procedure in the filing of an application for a public hearing would result in undue hardship to the applicant, the commissioner may waive the pre-application notice requirements, and §3907 of these rules shall not apply.
- B. However each such waiver must be expressly approved by the Office of Conservation, and in no instance shall the Office of Conservation approve a waiver under these rules unless there can be compliance with the 15 day provision of §3937.
- C. The hearing application under this procedure shall be filed with the commissioner (in duplicate), with a copy to the district manager and to each interested owner and represented party. Interested owners and represented parties need not be furnished the lists described in §3917.C.2 and 3, but the applicant upon request shall furnish copies of said lists to the requesting party. In addition to outlining the purpose thereof, the application shall include or be accompanied by the following:
- 1. a statement to the effect that the Office of Conservation has waived the pre-application notice requirements and that §3907 of these rules shall not apply;
- 2. a list of the names and addresses of interested owners and represented parties who are being furnished with a copy of the application;
- 3. a list of the names and addresses of all interested parties who are known to the applicant after reasonable search. In addition to the publication of the legal notice by the commissioner in the official state journal, the applicant shall provide for posting of a copy of the legal notice of the hearing and unit plat or plats in a prominent place in the area affected and publication of a copy of the legal notice in a newspaper published in the vicinity or general area of the affected field at least 15 days before the hearing. The applicant shall mail copies of the legal notice to all interested owners, represented parties and interested parties and a copy of the unit plat or plats shall be included with the legal notice, if said parties have not already been furnished same. Evidence to establish posting, publishing and mailing shall be submitted at the hearing;
- 4. a statement that a reasonable effort has been made to obtain a complete list of interested parties, interested owners and represented parties;
- 5. a day, time and place for a pre-hearing conference which shall be scheduled for not less than 10 calendar days after the date of the application. Any such conference shall be held within the state of Louisiana (unless mutually agreed otherwise among all interested owners and represented parties), in a city reasonably convenient to the persons involved:
- 6. a unit plat, if units are involved, prepared in accordance with all applicable memoranda and the procedure for assigning nomenclature of LAC 43:XIX.103,

- with any geological bases for any unit boundary labeled thereon, and the other items required by statute or by the commissioner. A reasonable effort shall be made to prepare the plat in sufficient detail to enable affected parties to determine the location of their lands;
- 7. a definition of the sand proposed for unitization with such sand defined in each reservoir thereof by reference to well log measurements.
- D. A request for rules and regulations for more than one sand shall be a separate application for each sand, and the commissioner shall be furnished an extra copy of the application for each additional sand affected thereby. An application fee for each sand shall be filed with the application as established by Part XIX, Subpart 2 or successor regulation.
- E. If any interested owner or represented party desires to confer about the applicant's proposal, he shall be represented at the pre-hearing conference provided for above. The pre-hearing conference shall be conducted in accordance with §3913.
- F. Immediately after the pre-hearing conference, the applicant shall furnish the commissioner and the persons to whom the application was sent a brief report on the conference and a list of the parties in attendance.
- G. If, as a result of the pre-hearing conference, the applicant's proposal as set forth in the application is revised, the applicant shall notify the commissioner, the district manager and all parties to whom the application was sent of the revision and furnish them with a copy of the revised unit plat, if units are involved, and with an explanation of the revision.
- H. If differences are not resolved or if any interested owner or represented party desires to oppose or support a proposal by the introduction of evidence at the hearing, then not less than five calendar days before the hearing, he must file with the commissioner and furnish to the district manager, the applicant and all persons who attended the conference his counterplan or supporting plan, including a plat of his proposed unit, if units are involved, prepared in accordance with all applicable memoranda and the procedure for assigning nomenclature of LAC 43:XIX.103, with any geological bases for any unit boundary labeled thereon, accompanied by a letter explaining any points of difference with the applicant's plan.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30.4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:762 (June 1993), repromulgated LR 19:1030 (August 1993).

§3919. Revisions after Application

A. If, after the application is filed, the applicant's proposal is revised, the applicant shall promptly notify the commissioner, the district manager and all parties to whom the application was sent, of the revision and furnish to them a copy of any revised plan and unit plat, if units are involved, and shall, if requested, hold a conference to

discuss the revised proposal prior to the hearing. If there are differences among the applicant, interested owners and represented parties as to the applicant's revised proposal, and the differences are resolved as a result of any conference, the applicant shall file the revised plan and plat promptly with the commissioner and furnish a copy to the district manager and to all parties to whom the application was sent. No revised proposal may be considered at the hearing unless notice of the revision has been sent to the commissioner, the district manager and to all parties to whom the legal notice was sent, at least five days prior to the hearing. The applicant shall present both the original application proposal and the revised proposal at the hearing, with evidence to support the revision. The time provisions of §§3915 and 3917 shall not apply to revised proposals filed less than 20 days prior to the day of the hearing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:763 (June 1993).

§3921. Additional Requirements for Opposition to or Support of Application

- A. If any opponent or party supporting the applicant did not present the geological, engineering or other bases for his opposition or support at the preapplication conference, prehearing conference, or such other conferences provided by these rules, or if there has been a change in the bases for his opposition or support, such opponent or supporting party shall disclose to the parties in attendance at such conference the geological, engineering or other bases for his opposition or support by mailing to them on or before the date set for filing a counterplan copies of his structure map and such other geological and engineering interpretations of the data as were disclosed by the applicant pursuant to §3913.
- B. If any interested owner or represented party desires to add one or more units to an applicant's plan, such interested owner or represented party shall, within five days after receiving the applicant's pre-application notice, secure waiver of pre-application notice and file his application under §3917 for the additional units so proposed, scheduling the required conference at the same time, date and place as the pre-application conference scheduled by the initial applicant.
- C. With respect to any hearing application relating to the initial creation of poolwide units under Section 5C (Act 441 of 1960) of Chapter 1 of Title 30 of the Louisiana Revised Statutes of 1950 any party who has received notice of the hearing and who wishes to introduce evidence in opposition to such application shall file with the commissioner and furnish to the district manager and interested owners and represented parties, at least 10 calendar days prior to the date of the hearing, a letter explaining the opposition to the applicant's plan, including a plat, if appropriate, and at the request of any party, shall immediately disclose to the requesting party the geological, engineering or other bases for his opposition in a manner convenient to the parties.

AUTHORITY NOTE: Promulgated in accordance with R.S. $30.4\ \text{et}\ \text{seq}$.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:763 (June 1993).

§3923. Commissioner's Conference

A. The commissioner shall have the right to call a pre-hearing conference at any time prior to the hearing, if in his opinion such a conference would resolve or narrow the issues in controversy or would assist in the conduct of the hearing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:763 (June 1993).

§3925. Timeliness of Filings

A. All notices and filings provided for herein shall be presumed as given timely when the date or actual date of receipt, if hand delivered, of the copy received by the commissioner complies with appropriate delays herein provided. Copies to interested owners and represented parties shall be deposited on the same day in the United States mail, properly stamped and addressed, or, if telegraphic or wireless communication is used, dispatched on that day by the transmitting party.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:763 (June 1993).

§3927. Notice of Continued Hearing

A. When a hearing is opened and continued, the notice given for the original hearing shall be applicable to the continued hearing, if the hearing officer at the time of granting the continuance designates the new time, date and place of the continued hearing. In all other instances of a continued hearing, the applicant shall at least 15 days before the hearing provide notice of the continued hearing by posting such notice in a prominent place in the area affected, by publishing such notice in a newspaper published in the vicinity or general area of the affected field and by mailing such notice to all interested owners, represented parties and interested parties.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:763 (June 1993).

§3929. Rules of Hearing Conduct and Procedure

A. The applicant shall first present the entire geological, engineering or other bases in support of his proposal. Any interested owner or represented party who supports the

applicant and complied with §§3915, 3917 or 3921 shall next present the entire geological, engineering or other bases in support of the applicant's proposal.

- B. Any interested party wishing to present evidence supporting the applicant's proposal shall do so immediately after the applicant and supporting parties have completed their presentations.
- C. Opponents who have complied with §3915, §3917 or §3921, in the order determined by the commissioner, shall then present the entire geological, engineering or other bases for their opposition. After all opponents have made their presentations, the applicant may present rebuttal geological, engineering or other testimony, but strictly limited to a refutation of the matters covered by the opponents. Rebuttal testimony should not be used to prove matters that should have been proven on direct examination.
- D. Any witness shall be subject to cross-examination by the commissioner or any member of his staff and by no more than two representatives of a party. Cross-examination shall be conducted in accordance with the following guidelines.
- 1. Cross-examination should be limited to questions concerning the testimony and exhibits presented by the witness, and the witness should not be required to make measurements or calculations or comparisons between his exhibits and those presented by any other witness.
- 2. Matters peculiarly within the knowledge of the cross-examiner or his witnesses should be presented by them on direct examination, and there should be no attempt to establish such matters by cross-examination.
- 3. Cross-examination shall be conducted in a polite and courteous manner without reference to personalities of the witness or the party represented by the witness.
- E. After the applicant and any opponents have made their presentations, any party shall be afforded an opportunity to make a statement. If such a statement includes technical data, the party shall be subject to being sworn and cross-examined.
- F. The applicant, any opponent, or any supporting party may make opening or closing statements concerning their positions, but such statements shall not include technical matters which have not been presented by sworn testimony. The applicant shall have the right to make the last closing statement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:764 (June 1993).

§3931. New Evidence

A. If new pertinent data becomes available to any person after proceedings have been initiated hereunder, such evidence shall be made available immediately to all interested owners and represented parties by notice of its availability and by release in accordance with §3909. Such evidence may be used by any person at the hearing and may be the basis for revision of units or other proposals

previously made by the applicant or any opponent, but the commissioner in his discretion may determine that additional time should be afforded for consideration thereof. The commissioner in his discretion may also establish a time limit beyond which new evidence may not be employed in the present proceedings. In this event application for a new hearing to consider the new evidence shall be made as soon as possible.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30.4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:764 (June 1993).

§3933. Coverage of Rules

- A. Any interested owner or represented party who is not notified by an applicant, as set forth in §3907 or §3917, as appropriate, and who does not attend the conference requested pursuant to §3911 or the conference scheduled pursuant to §3917, whichever is applicable, shall not be bound by the time periods set forth in §§3915 and 3917. The time periods set forth in §§3915 and 3917 shall be modified in the discretion of the commissioner as the circumstances justify.
- B. Any attorney or consultant engaged at any time by an interested party shall immediately notify the applicant, interested owners and represented parties of his representation and thereafter said interested party shall be considered a represented party and shall comply with these rules of procedure. In this circumstance, §3921 shall be applicable if a conference were held, and the time periods set forth in §\$3915 and 3917 may be modified in the discretion of the commissioner as the circumstances justify.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:764 (June 1993).

§3935. Penalty for Non-Compliance

A. Failure to comply with the provisions of or the spirit of these rules of procedure shall prevent an application from being advertised or heard, or shall prevent an opponent or supporting party from presenting evidence at the hearing, but an order issued by the commissioner shall not be invalid by operation of this rule.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:764 (June 1993).

§3937. Time of Commencement

A. Unless circumstances indicate that undue hardship would otherwise result, every applicant shall commence proceedings under these rules of procedure so as to permit the application to be docketed, advertised, heard and properly considered for at least 15 days before the order is issued.

NOTE: If at all possible, any application hereunder should be received in the Baton Rouge office of the Office of Conservation at least 45 days before the application is to be fixed for hearing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:764 (June 1993).

Chapter 41. Unit and Survey Plats

§4101. Unit Plats

- A. The unit plat attached to any pre-application notice and/or any application and/or any unit plat presented at a public hearing shall properly identify the geologically significant wells which control the unit boundaries and shall show the distance of each such well from the unit boundary which it controls, and shall also show the property, lease or governmental subdivision lines which serve as unit boundaries and the section, township and range in which the unit or units are situated. The affected tracts shall be identified on the plat by the names of the fee and lease owners, based on the best available information.
- B. If a geographical unit is proposed, the unit plat attached to any pre-application notice and/or any application and/or any unit plat presented at a public hearing, shall show the property, lease or governmental subdivision lines which are used as unit boundaries and they shall be identified as such, based on the best available information.
- C. Each unit plat shall have a graphic scale shown thereon and copies of the base map upon which the unit is shown shall be made available to any interested party who requests it.
- D. All participants at any pre-application conference shall make every effort to agree as to the best available base map and, if there is agreement, all parties shall thereafter use said map.
- E. Any unit plat attached to a counter-plan shall follow all of the requirements set forth above and shall be on the same scale as that of the unit plat attached to the application.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by Department of Conservation, July 1, 1973, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:765 (June 1993).

§4103. Survey Plats

A. Survey plats presented to the Office of Conservation for approval after the issuance of an order shall properly identify all of the geologically significant wells and these wells shall be located on the ground based on the Lambert Plane Coordinate System or other recognized control, such as section corners, USC & GS monuments, etc. The survey plat shall show the distance of each geologically significant well from the unit boundary line which it controls and all geologically significant wells shall be located on the plat in correct relation to each other.

- 1. If a geologically significant well has been abandoned and cannot be found on the ground, the location as shown on the permit plat shall be used.
- 2. The affected tracts shall be identified on the survey plat by the names of the fee and lease owners, based on the best available information. Further, each unit plat shall have an inset or attachment showing the number, name, acreage (or other basis of participation) and the unit percentage participation of each tract.
- B. If geographical units are adopted by a unit order, there shall be shown on the survey plat the property, lease or governmental subdivision lines which are used as unit boundaries and they shall be identified as such, based on the best available information.
- C. The surveyed unit plat shall be based on the Louisiana Lambert Plane Coordinate System where practicable. If an orientation other than the Lambert Plane Coordinate System is used, the point of beginning for the unit outline shall be defined on the plat by relating the point to a known monument or section corner and the basis of the bearing orientation used for the survey shall be specifically defined.
- D. Unit boundaries shall be defined by using Lambert coordinates or courses and distances with the length of each course dependent upon the sinuosity of the outline of the boundary.
- E. If a unit order creates more than one unit the survey plat shall, if practicable, be a composite of all of the units, and if different unit operators are designated, the survey plat or plats shall be prepared through a coordinated effort of all designated operators. If not practicable to use a single composite survey plat for all of the units, a separate survey plat shall be prepared for each unit, with a composite plat showing all units.
- F. When the survey plat is completed and before recordation thereof, as many copies as may be needed by the operator, plus two copies of the survey plat and a film overlay on the scale of the unit plat attached to the order, shall be submitted to the Office of Conservation in Baton Rouge for approval. There shall be placed on or attached to each survey plat submitted for approval the following certificate signed by the surveyor.
- 1. The requirements for Unit Plats and Survey Plats adopted by the Commissioner of Conservation have been complied with in all respects.
- 2. Each producing unit shall be surveyed and the survey plat submitted for approval in accordance with the foregoing within 90 days after the issuance date of the unit order. If a unit is not producing when created, a survey plat thereof shall be submitted within 90 days after the date production commences.
- G. Exceptions to the provisions hereof may be granted by the Commissioner of Conservation, upon the showing of good cause therefor, without the necessity of public hearing or formal order.

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H. These requirements shall apply to any unitization proceedings initiated on and after the first day of July 1973.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Adopted by the Department of Natural Resources, Office of Conservation, October 1983, amended and promulgated by the Department of Natural Resources, Office of Conservation, LR 19:765 (June 1993), repromulgated LR 19:1030 (August 1993).

Part XIX. Office of Conservation—General Operations Subpart 18. Statewide Order No. 29-S

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Chapter 43. Austin Chalk Formation

§4301. Scope

A. This Statewide Order provides rules and regulations governing the drilling of horizontal wells in the Austin Chalk Formation in the state of Louisiana.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:1 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 24:102 (January 1998).

§4303. Definitions

A. Unless the context otherwise requires, the words defined in §4303 shall have the following meaning when found in this Statewide Order.

Austin Chalk Formation Horizontal Well—well with the wellbore drilled laterally at an angle of at least 80 degrees to the vertical and with a horizontal displacement of at least 50 feet in the Austin Chalk Formation measured from the initial point of penetration into the Austin Chalk.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:1 et sea

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 24:102 (January 1998).

§4305. Order

- A. From and after the effective date hereof, permission to develop the Austin Chalk Formation in the state of Louisiana by the use of horizontal wells may be obtained as hereinafter provided and upon strict compliance with the procedures set forth herein
- 1. The restriction on tubing size as set forth in LAC 43:XIX.109.E.1 of Statewide Order No. 29-B shall not apply to Austin Chalk Formation horizontal wells.
- 2. Statewide Order No. 29-E well spacing rules shall not apply to Austin Chalk Formation horizontal wells. The following well spacing rules shall apply to Austin Chalk Formation horizontal wells in areas in which no spacing rules for Austin Chalk Formation horizontal wells have been established by special orders, provided that exceptions may be approved after a public hearing based on 10 days legal notice:
- a. a subsequent Austin Chalk Formation horizontal well shall not be located so as to encroach into a rectangle formed by drawing north-south lines 3,000 feet east of the most easterly point and 3,000 feet west of the most westerly point and east-west lines 100 feet north of the most northerly

point and 100 feet south of the most southerly point of any horizontal well completed in, drilling to, or for which a permit shall have been granted to drill to the Austin Chalk Formation. In the case of a single horizontal well, the point of entry into the Austin Chalk Formation (if available) is to be used in lieu of the surface location in determining the northern or southern boundary of the rectangle;

- b. survey plats submitted with the application for permit to drill shall contain certification of the surveyor specifying compliance with this requirement;
- c. multiple Austin Chalk Formation horizontal well laterals drilled into the same stratigraphic interval from a single wellbore will be treated as a single completion, even if the laterals are isolated by separate producing strings to the surface.
- 3. The gas allowable provisions of Statewide Order No. 29-F shall not apply to Austin Chalk Formation horizontal wells. Instead, Austin Chalk Formation horizontal wells shall be given an allowable based on the Maximum Efficient Rate (MER) of the well, being the maximum sustainable daily withdrawal rate from the reservoir which will permit economical development and depletion without causing waste. In the event an alternate unit well is authorized for any Austin Chalk Formation unit, such unit allowable shall be limited to the greater of the MER of the best well in said unit or the highest rate of withdrawal on a per acre basis of any unit in the same reservoir and field. If there is any complaint of waste or dispute relative to compliance with R.S. 30:11(B), the allowable assigned to an Austin Chalk Formation horizontal well shall be subject to adjustment after a public hearing based on 10 days legal notice
- a. Unless an exception is granted as provided herein, no allowable will be granted for a horizontal completion in the Austin Chalk Formation until a unit has been formed pursuant to an Office of Conservation Order for the well unless the operator agrees to escrow all monies received from pre-unitization production pending unitization and distribute such funds on the basis of the unit ultimately established.
- b. The operator of a well may request an exception to this requirement for a well located on a large lease/voluntary unit or for other good cause shown.
- c. The Commissioner of Conservation will have the discretion to either approve or deny such application or require that the applicant request a public hearing to be held after 10 days legal notice to consider the matter.

- 4. The Office of Conservation's policy requiring a sand definition and production test in the field before units can be established shall not apply to Austin Chalk Formation horizontal wells.
- 5. The size and shape of units for Austin Chalk Formation horizontal wells should usually be based on the proposed design of the well because such units are expected to be developed by horizontal laterals which traverse the entire unit in a generally north-south direction. If the initial lateral in a drilling unit fails to provide full horizontal coverage in a north-south direction, additional horizontal laterals or wells drilled to acquire that coverage shall be considered and named unit wells rather than alternate unit wells. However, if any such additional unit well or lateral overlaps an existing unit well or lateral in an east-west direction, it shall be considered and named an alternate unit well. Overlaps shall be determined by use of a line parallel to the north and south unit boundaries. This provision shall only apply to Austin Chalk Formation horizontal wells and shall not be used as a precedent for any other formation.
- 6. The party who owns or controls the majority working interest in a drilling unit established for an Austin Chalk Formation horizontal well shall have the right to be designated the operator of such unit. Such ownership or control shall be based on sworn testimony at the public hearing which creates the drilling unit. If the working interest ownership or control in a unit is not known or cannot be established with reasonable certainty when the unit is created, then the operator designation shall occur when a drilling permit is issued for the drilling of a well on the unit. The party requesting such drilling permit shall complete and file an affidavit corroborating such majority ownership or control on the affidavit form provided by the file in the Office of Conservation. It is provided, however, that any party designated as a unit operator can be removed or a working interest owner who does not own or control the

- majority in working interest can be designated as unit operator after a public hearing based on 10 days legal notice if it is demonstrated that the designated operator and/or majority working interest owner has not timely developed the unit, has not acted prudently, or that other good cause exists therefor.
- 7. Statewide Order No. 29-B requires that a directional survey be run on all wells which are directionally controlled and thereby intentionally deviated from the vertical. The requirement that a directional survey be run the entire length of the lateral in an Austin Chalk Formation horizontal well may be waived by the Office of Conservation if evidence is presented at the time such waiver is requested that the directional survey cannot reasonably reach the end of the lateral and that measuring from the point where the directional survey ends, the lateral of the well will still be:
- a. within the spacing provisions for the unit upon which it has been drilled or, if a unit has not been established, under a tract for which authority to drill has been obtained; and
- b. at least the distance from all offsetting wells required by applicable spacing rules or in the absence thereof, the provisions of §4305.A.2.
- 8. An application for permit to drill in an area affected by a pending application requesting the formation of one or more units will be issued without regard to the pending unitization proceedings. However, the permit so issued shall not be used at the hearing (only drilled wells may be considered), and the permit will be subject to the order issued as a result of such hearing.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:1 et seg

HISTORICAL NOTE: Promulgated by Department of Natural Resources, Office of Conservation, LR 24:102 (January 1998).

Part XIX. Office of Conservation—General Operations Subpart 19. Enhanced Recovery

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Chapter 45. Produced Water Injection Incentive

§4501. Definitions

Produced Water—water that is obtained by processing fluids brought to the surface in conjunction with the recovery of oil and gas from underground geologic formations.

Produced Water Injection Project—project approved in accordance with R.S. 47:633.5 and the rules adopted herein for the purpose of increasing the recovery of hydrocarbons therefrom.

AUTHORITY NOTE: Promulgated in accordance with R.S. 47:633.5 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, and Department of Revenue, Severance Tax Division, LR 24:2126 (November 1998), repromulgated LR 24:2282 (December 1998).

§4503. Application and Hearing to Qualify a Produced Water Injection Project

- A. A 30-day notice and a public hearing shall be required as per rules of procedure for conducting hearings before the Commissioner of Conservation, LAC 43:XIX.3901, R.S. 30:5(C) and R.S. 30:6. In addition to any exhibits and testimony that may be necessary supporting compliance with LAC 43:XIX.3901, R.S. 30:5(C) and R.S. 30:6, the hearing testimony is to include discussions and exhibits of the following:
- 1. geological and engineering data to support *Produced Water Injection Project* classification as per R.S. 47:633.5;
- 2. geological and engineering data necessary to establish the estimated remaining primary and incremental oil and gas reserves expected from the proposed produced water injection project along with the estimated amount of severance tax to be forgiven;

- 3. estimated date of initiation of water injection which must begin on or after July 1, 1998;
- 4. proposed sources of produced water to be utilized for injection;
- 5. estimated date of commencement of incremental production;
- 6. any other pertinent information the application deems necessary.

AUTHORITY NOTE: Promulgated in accordance with R.S. 47:633.5 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, and Department of Revenue, Severance Tax Division, LR 24:2127 (November 1998), repromulgated LR 24:2282 (December 1998).

§4505. Commencement of Incremental Production

A. Immediately after the commencement of incremental production and before any such incremental production shall be eligible for the reduction of severance tax, the unit operator shall petition the Commissioner of Conservation to issue a Supplemental Order establishing the beginning of the incremental production contemplated by Subsection C of R.S. 47:633.5. Engineering and geological data shall be submitted showing that the primary reserves have been depleted and the incremental production has commenced. The specific date upon which incremental production began shall also be submitted. Once the date of commencement of been incremental production has established Supplemental Order, all production thereafter from the project will be subject to a 20 percent reduction in severance tax otherwise due on each barrel of oil produced and each 1,000 cubic feet of gas produced.

AUTHORITY NOTE: Promulgated in accordance with R.S. 47:633.5 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, and Department of Revenue, Severance Tax Division, LR 24:2127 (November 1998), repromulgated LR 24:2282 (December 1998).

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